Senior Technology Literacy and Access Project

Recommendations for Project Options

Nancy R. Ashley

Prepared for

Citizens Technology and Telecommunications Advisory Board

City of Seattle Executive Services Department
Technology Division

March 23, 1998

Acknowledgments

The information contained in this report was gathered and produced with the assistance of:

Citizens Technology and Telecommunications Advisory Board

Larry Berg
Janice Friedman
Arthur Siegal

City of Seattle Executive Services Department, Technology Division

David Keyes, Community Technology Planner
Rona Zevin, Director of Interactive Media

City of Seattle Department of Housing & Human Services

Mayor's Office for Senior Citizens (Telephone: 206 684-0500)

Cynthia Ellison, Public Information Specialist
Nita Richardson, Director

Division of Aging and Disability Services (Telephone: 206 684-0660)

Pam Piering, Director

King County Seniors Online (Telephone: 206 361-0369; or web site http://www.scn.org/people/seniors)

Ralph Pfister

Madrona Resource Associates

Michael Kern, Principal (Telephone: 206 320-9216; e-mail mkern@halcyon.com)

For more information about this report, the Citizens Technology and Telecommuni-cations Advisory Board, and Seattle's citizens technology literacy projects: visit http://www.ci.seattle.wa.us/tech/default.htm or contact David Keyes (Telephone: 206 386-9759; e-mail: david.keyes@ci.seattle,wa.us)

To contact the author, Nancy R. Ashley (Telephone: 206 526-5671; e-mail nancyashley@halcyon.com)

Table of Contents

Executive Summary

The City Council in 1997 established a Citizens Literacy and Access Fund for fiscal year 1997-98. The Citizens Technology and Telecommunications Advisory Board (CTTAB) was charged with identifying projects for use of Fund resources. Seniors' technology literacy was one area of concern identified by the Board and subsequently was allocated $40,000 ($10,000 for 1997 and $30,000 for 1998).

A Senior Project subcommittee determined it needed more information on the status of seniors in Seattle, local and national initiatives, and project options in order to recommend the most effective use of the Senior Project resources. This report is intended to address that request.

The Senior Project committee determined the following goals for the project:

- Build capacity in the community for use of computers by seniors (for example, training, helping connect existing resources, wiring existing sites, becoming more competitive for future resources).
- Build a dialogue about seniors and computers, including possible uses of computers and how computers affect seniors.
- Encourage senior groups to work together.
- Encourage seniors and those of other ages to work together.
- Reach seniors who currently have little access to or knowledge about computers.

To provide a basis for recommendations on use of the funds for the Senior Project, the senior subcommittee of the Citizens Technology and Telecommunications Advisory Board, city staff, and two consultants:

- Scanned local and national survey results to learn what seniors were reporting directly about computer ownership and usage.
- Collected and analyzed information about the location and scope of computer equipment, programs, and training in Seattle available to seniors.
- Compiled and analyzed demographic information about seniors in Seattle.
- Surveyed ten programs to gather in-depth views about seniors and their use of computer technology.
- Researched local, regional, and national initiatives to demonstrate what is currently being done to improve technology literacy and access among seniors.
- Held an advisory forum of 19 people knowledgeable about seniors and technology to seek their input and advice on use of the Senior Project funds.
- Synthesized results of the above steps.

The recommendations from each element analyzed above are summarized below:

Type of Project. The Senior Project funds should be used to increase training/assistance and/or improve equipment at many locations. Based on specific input at the Forum, **any project should**

include access to and use of the Internet as a component of enhancing technology literacy and access for seniors.

Target Audience. Projects should serve some or all of the six sub-areas (**Northwest, Northeast, Downtown, Ballard, West Seattle/Southwest/Delridge, First Hill/Capitol Hill, and Southeast)** which have a high number of people 65+ and a high percent 65+ in poverty **and** which also have a high percent of minority people **or** limited sites for seniors. Although projects may serve other areas as well, emphasis should be placed on serving sub-areas that meet these parameters.

Type of Location. Projects at any type of location (home, senior centers, general community centers) will have some value and have some support from those who offered input. There is no clear choice of type of location.

Purposes for Seniors' Use of Technology. Projects would ideally lead to seniors' learning and using a wide variety of applications for a wide variety of purposes. Within that broad spectrum, however, projects should place special emphasis on projects which build a dialogue around seniors and computers, encourage seniors and those of other ages to work together, create a sense of community for seniors, strengthen the ability of seniors to be self-reliant, maintain and enhance culture and heritage, and help overcome physical limitations and other special needs. These purposes are consistent with the City's overall role and place priority on issues that may receive limited attention from others.

Encouraging and Attracting Seniors. All projects should address and incorporate outreach and marketing approaches which specifically address both the internal (desire to know more, do existing tasks more quickly, be connected with other people) and external (senior instructors, low cost, nearby location, personal assistance, programs designed specifically for seniors) factors which attract seniors to learn about and use computer technology.

Challenges/Barriers to Seniors' Use of Technology. All projects should address ways that they will help overcome the barriers to seniors' use of computer technology. In many cases, it will be important to begin with basic skills such as typing and understanding a computer. Instructors should anticipate and address fears. Programs should strive to be affordable and to provide adaptations for visual, hearing, or physical impairments.

Based on the information and research gathered, the input received, and analysis of that research and input, the following project options are presented for consideration by the Citizens Technology and Telecommunications Advisory Board and the City:

1. *Senior Technology Directory:* Create and distribute a directory of places where seniors have access to computers and the Internet and where they can receive technology training and assistance.

2. *Training Senior Trainers:* Recruit seniors from underserved populations to attend a "senior technology training institute" where participants would learn a variety of computer skills, including Internet uses such as e-mail and chat groups. Each participant would agree to provide a specified number of hours of training to other seniors from underserved populations.

3. *Provide Technical Assistance to Enhance Existing Technology Sites for Seniors:* Provide 6-10 hours of assistance to sites that currently serve or want to serve seniors. Assistance would be provided in areas of program design, equipment selection and architecture, grantwriting and community involvement/volunteer development.

Priority would be given to sites and programs reaching or trying to reach target populations.

4. ***Create a Purchasing Cooperative:*** Organize individuals and programs willing to advocate with equipment and services suppliers to offer an ongoing discount program for individual low income seniors and to programs serving seniors. Important components to include would be computers, modems, software, Internet service, and individual e-mail accounts.

5. ***Provide Equipment and Internet Connections:*** Purchase computers, hardware upgrades, modems, and software to enhance existing sites that provide technology access and training to seniors. Provide funding for initial telephone and other costs to obtain Internet services. Priority would be given to sites reaching or trying to reach target populations.

6. ***Provide Increased or Enhanced Staffing:*** Pay for short-term staffing increases or enhancements at existing sites to offer specific classes or programs. Priority would be given to sites reaching or trying to reach target populations and to those who would use this opportunity to increase ongoing capacity (for example, by training more volunteer trainers).

These project options are to be considered by CTTAB and a recommendation made to implement one or more of them. In most cases, implementation of the recommended Senior Technology Project(s) would be best accomplished through a Request for Proposals (RFP) process consistent with the senior project criteria contained in this report.

Introduction

Changes resulting from the technological revolution in communications and information are worthy of intense focus because of their implications on democratic values and institutions. Among the concerns is a widening gap between the so-called information rich and poor.[1]

The policy questions surrounding the technology explosion can be discussed in terms of three key factors: access, resources, and skills. The information revolution is emerging as a major turning point in the economic, social, and cultural arenas, and unless one has a sense of how the country as a whole – or a community – is moving with respect to access and usage, one cannot label this technological movement a success. Some early studies in the diffusion of computer technology have shown that income and education are the most important variables in terms of computer ownership.[2]

Persons age 55 and over in Seattle comprise about 22.5% of Seattle's 1990 population of about 519,000. Persons age 65 and over comprise about 15% of the total.

Recently, studies have begun to address particular gaps in usage: gender, age, and race and ethnicity. To the extent that income and education determine participation in computer technologies, it is likely that people of color will be disadvantaged because they tend to have lower income and educational levels compared to whites.[3] The particular focus of this report is the age gap, although considerations of race, income and gender are part of that picture.

How can electronics facilitate more productive and enjoyable later years of life? As the communications revolution continues, will older individuals lose, in some ways, their franchise as participatory citizens? Who is addressing these questions in Seattle? What is the appropriate role of City government?

Purpose of this Report

This report provides recommendations for use of $35,000 from the Citizens Literacy and Access Fund that was allocated for a Senior Project by the City Council in August 1997. The report contains information that formed the basis of those recommendations and provides a solid assessment of the topic of seniors and computer technology in Seattle that may be useful for other projects.

---

[1] Arlen, Gary, "SeniorNet Services: Toward a New Electronic Environment for Seniors." The Aspen Institute, 1991.

[2] Novak, Thomas P. and Donna L. Hoffman, "Diversity on the Internet: The Relationship of Race to Access and Usage," paper prepared for the Aspen Institute's Forum on Diversity and the Media, November, 1997. Found at http://www.becrc.org/

[3] Ibid.

Background, Goals of the Senior Technology Literacy and Access Project

Based on the City of Seattle's observations about our society's increasing reliance on computers and electronic services, and a growing awareness that many people in Seattle did not understand or have access to computers or a way to learn how to use one, the City Council in 1997 took initial steps to address the situation. Under the leadership of Councilmember Tina Podlodowski, the City established a Citizens Literacy and Access Fund for fiscal year 1997-98.

A Citizens Technology and Telecommunications Advisory Board (CTTAB) was charged with identifying projects for use of Fund resources. A Senior Technology Literacy and Access Project, proposed by CTTAB members Larry Berg, Janice Friedman, and Arthur Siegal, was one of six projects recommended by the Advisory Board. The six projects were approved by the City Council in August 1997. The Senior Project was allocated $40,000 ($10,000 for 1997 and $30,000 for 1998).

The CTTAB members who proposed the Senior Project formed a subcommittee of CTTAB. With the assistance of the Mayor's Office for Senior Citizens and Seattle-King County Aging and Disability Services (administered by the City of Seattle's Department of Housing and Human Services), the group developed an initial proposal. The subcommittee members then determined that more information was needed to make a well-informed and fair decision. They allocated $5,000 of the Project funds for an assessment of opportunities and needs and to generate options for the best approach for the Senior Project.

In January 1998, the CTTAB senior subcommittee, staff within the City's Executive Services Department, and two consultants began work to quickly gather and organize available information which would inform decisions on use of the remaining $35,000 available for the Senior Project. Staff from the Mayor's Office for Senior Citizens and Aging and Disability Services continued to participate in development of the Project.

Goals of Senior Technology and Literacy Project

The goals of the Senior Project reflect those areas of funding deemed appropriate for use of City resources. The goals indicate a desire to use the funds available to build long-term capacity or infrastructure, rather than support a specific program. The goals are to allocate approximately $35,000 of City funds to a project or projects which:

- Builds capacity in the community for use of computers by seniors (for example, training, helping connect existing resources, wiring existing sites, becoming more competitive for future resources).

- Build a dialogue about seniors and computers, including possible uses of computers and how computers affect seniors.

- Encourage senior groups to work together.

- Encourage seniors and those of other ages to work together.

- Reach seniors who currently have little access to or knowledge about computers.

As part of long-term goals to:

- Enhance quality of life.
- Enable seniors to connect and fully participate as community members.
- Enable seniors to make informed choices about computers and technology.
- Increase support among seniors for Seattle to be a leader in technology.
- Decrease gap between seniors' use of computers and that of other age groups.

Methodology

To provide a basis for recommendations on use of the funds for the Senior Project, the senior subcommittee of the Citizens Technology and Telecom-munications Advisory Board, city staff, and two consultants (who came on board in early February) did the following between January and mid-March 1998:

- Scanned local and national survey results to learn what seniors were reporting directly about computer ownership and usage.
- Collected and analyzed information about the location and scope of computer equipment, programs, and training in Seattle available to seniors.
- Compiled and analyzed demographic information about seniors in Seattle.
- Conducted and compiled the result of a survey of ten programs to gather in-depth views about seniors and their use of computer technology.
- Researched local, regional, and national initiatives to demonstrate what is currently being done to improve technology literacy and access among seniors.
- Organized and held an advisory forum of 19 people knowledgeable about seniors and technology to seek their input and advice on use of the Senior Project funds.
- Synthesized results of the above steps.
- Developed recommendations for Project options, based on this synthesis.

The results of this assessment and recommendations are described in this report.

Limitations

As with any assessment of people's beliefs, behavior, and preferences, the analysis contained in this report represents a balance among the time and resources allocated, the amount and type of information available, and keeping the scope of the assessment commensurate with its uses. To the best of the author's knowledge, this is the first assessment in Seattle of senior technology resources and needs. While it is believed that this assessment is thorough and thoughtful, it does not purport to be comprehen-sive. The surveys of local programs are not necessarily representative of programs across the city, nor were the forum participants representative of all perspectives. The examples of other initiatives are only a sampling of many hundreds across the country.

However, a variety of sources were used in the assessment to ensure a broad perspective and integration of what may be seen through different lenses. Recommendations for further study are contained in the final chapter.

Existing Situation: Seniors and Technology in Seattle

This chapter:

- Provides an overview of what seniors in Seattle and around the country are saying in surveys and forums about computers and technology;

- Summarizes some of the relevant demographics about seniors in Seattle; and

- Describes existing computer equipment, programs and services in the city that are available to seniors.

Local Survey of Individuals

A May 1997 survey conducted in Seattle provides a recent view of the current situation and opinions among seniors in Seattle. Portions of the results of that survey are summarized below.

Access, Use and Potential Use of Computers Among Seniors in Seattle[4]

Comparison of People Age 55+ in Seattle and Total Population

	Age 55+	Total Population
Use a personal computer at home	34%	54%
Use a personal computer at work	20%	48%
Do not use a computer at home or work	56%	27%
Use a computer at another location such as the library, school, or café	14%	25%
Have Internet access on any of the computers they use	58%	78%
Ever visited the City of Seattle web site (PAN)	21%	18%

National Survey of Individuals

A November 1995 survey of American senior adults sheds further light on the situation. However, given the pace of change in this arena, it is likely that some of them are already somewhat dated. A few of the findings from this survey are noted below:

---

[4] Information drawn from the 1997 Citywide Residential Survey conducted in May 1997 by Northwest Research Group.

Computer Ownership and Use among Americans Age 55 and Older[5]

Ownership
- Overall computer ownership in the 55-75 age group is 30%.
- 23% of female seniors report owning a personal computer.
- 38% of male seniors report owning a personal computer.

Use

- Computer usage in the 55-75 age group was up 21% between July 1994 and November 1995.
- Married seniors use computers more than single seniors (34% to 27%).
- Working seniors use computers more than non workers (34% to 27%).
- Senior men are more likely than women to go online (37% to 14%).
- 72% of online seniors exchange e-mail.
- 65% of senior online users have accessed the Internet in the past 30 days.
- 36% of online seniors spend 3-10 hours online per week.
- 74% of senior online users classify their computers as extremely helpful.

At this time, the available data indicates that computer ownership between seniors in Seattle and those around the country is at similar levels. The Seattle 1997 survey showed that 34% of people age 55 and older use computers at home. If we assume that most of them own those computers, this rate is quite similar to the ownership rate of 30% reported in the 1995 national survey.

Local and National Forums

Local Forum. On March 5, 19 people gathered for a half-day at the Seattle Center to offer their advice and opinions about seniors' use of computers and preferences for how the Senior Project funds are used.

The group was comprised of seniors with a variety of backgrounds, views, and levels of knowledge about information technology and of people working with seniors to use and apply computer technology. A roster of participants is included as Appendix A.

That group first identified the ways in which seniors use computers that they believed were most beneficial and then generated a list of the factors that encourage or attract seniors to use computers. They selected the following items as the most important in each category:

---

[5] The Teel Group, Inc., Prescott, AZ, http://www.sunliving.com. Information based on a phone-based survey of adults including computer owners and non-owners by Frederick/Schneiders for SeniorNet, underwritten by a grant from the Intel Corporation.

Most beneficial uses of computers by seniors

Uses	Examples Offered
Communication	▪ E-mail with family, friends ▪ Participation in on-line discussions
Access to information and resources	▪ Health information ▪ Job search
Self improvement	▪ Skill development ▪ Keeping knowledge current ▪ Personal fulfillment ▪ Mental activity/agility
Relaxation/enjoyment/ hobbies	▪ Games ▪ Genealogy
Earn income	▪ Home-based businesses ▪ Job skills
Overcome limitations/ address special needs	▪ Socialization for people who cannot get around easily ▪ Adaptations to address vision or hearing impairments

Factors most likely to encourage or attract seniors to use computers

Factors	Examples Offered
Personal motivation	▪ Need the technology for a specific task ▪ Understand the usefulness of knowing word processing, e-mail, Internet use ▪ Encouragement from peers ▪ Desire to communicate by e-mail with child or grandchild (bridges gap between ages) ▪ Want to be in tune with current technology
Easy way to learn; easy access to a computer and training	▪ Free or low cost training ▪ Convenient location and time for training or access to computers ▪ Classes geared specifically for seniors ▪ Being given a computer by friends, family, neighbors

The group also developed recommendations for the types of equipment, programs, or services to be funded through Seattle's Senior Technology Literacy and Access Project. The results of that portion of the discussion are contained in a later chapter.

National Forum. The Aspen Institute's Communications and Society Program held a national forum of 28 people in 1992. Participants included experts and leaders in the areas of elder population, networking technologies, social issues, and in the subject areas of elders' education, retirement, health, finances, and citizenship.[6] That group generated a list of insights about seniors and their interest in technology that is likely still accurate:

- Seniors don't want another information service. They want "life satisfaction," and they will accept and use tools that help them achieve their personal goals. The goals often involve spiritual, holistic sensibilities and values.

- Education/training is not just for entertainment. Social gratification plays a major role in the education process.

- Economic cutbacks—especially reduction of government services—have created hardships for seniors who depend on publicly available information or services. Seniors have more trouble than others (e.g. the active workforce) in accessing channels that provide routine business, financial, health or community information and services (such as corporate benefit offices or the carpool grapevine).

- Nonetheless, even among seniors who are technologically knowledgeable or willing to learn technology, there are some limitations. For example, physical restrictions such as mobility problems can make communication by computers an asset, while others, such as difficulty in reading computer screens, may affect the ways in which seniors can use a computer service.

- Seniors are attracted to organized programs including classes on retirement planning, literacy promotion, health, volunteer service training, arts and humanities and business training. Groups offering training/services should take advantage of the "teachable moment" when a person wants to learn.

Local Survey of Organizations Serving Seniors

Volunteer members of the Citizens Technology and Telecommunications Advisory Board conducted telephone and in-person interviews during February 1998 to gather information and input from organizations around the city about how and to what extent older people in Seattle are participating in computer programs and services. A total of 10 interviews were conducted with representatives of senior services, community and ethnic agencies, computer labs and training centers. A list of those interviewed is included in Appendix B.

---

[6] Arlen, supra.

Those interviewed offered the following responses to specific questions about the people age 55 and older that they serve (other portions of the survey results are presented in the next chapter; the full summary of the interviews is provided in Appendix C):

Most Important/Beneficial Ways To Use Computers

(The number of organizations providing a similar answer is noted in parentheses following the responses.)

- Good confidence builder; helps them feel modern; getting comfortable with technology generally, which they need to use in many contexts but may avoid; personal satisfaction (4)
- Knowledge; expand services and information to seniors through the Internet, such as transportation and health information (4)
- Preserve cultural heritage; create family histories with scanned photos and personal history; record local history; preserve information which might be lost (3)
- Corresponding with relatives and friends; one person at the YMCA sends baby pictures weekly to infirm parents in Hawaii who will never be able to travel (3)
- General knowledge/use; connect to the world and stay alert and informed (3)
- Organizing business, budgets, financial services (2)
- Entertainment; social opportunity (2)
- Improve motor skills
- Word processing
- Intergenerational meeting with local youth

Factors that Most Enable or Attract Seniors To Use Computers

- Sense of keeping up to date; wanting to know more; curiosity; intellectually stimulating
- Entertainment; novelty
- Communal aspects, feeling connected to other people; interaction with younger people; get them out of the house; social action
- Family contacts; family members encourage them
- Easy way to do work; computers might be a tool to resolve writing needs relative to arthritis or other difficulties; word processing; manage investment portfolio
- Small classes in their neighborhood, taught by older people and sensitive to seniors
- Free or low cost
- Flexible class setup and curriculum

Largest Challenges/Barriers to Senior Use of Computers

- Training/trainers; need one on one – don't want to be in big class
- Seniors can't drive to center at night when volunteers are available
- Icons and keyboards are small; size of monitor
- Fear of something new; fearful of technology until they take a class
- High cost/confusion; feeling intimidated by salespeople when shopping for computers; sometimes seniors have bought computers and then been stumped with set-up and usage
- Learning the basics of keyboarding; typing skills, it is like trying to learn a new language; fear of failure; fear of breaking the machine

Demographics

An understanding of the number of seniors in Seattle, some of their characteristics and differences, and their distribution around the city is an important element in determining how and where portions of Seattle's Citizens Literacy and Access Fund should be used.

While there is a great deal of demographic data available, and one can easily drown in statistics, it is difficult to both identify and find the most relevant information. Information from the 1990 US Census is increasingly out-of-date, yet there is nothing more reliable to replace it. Boundaries for analysis of neighborhood or district information within the City of Seattle differed between 1980 and 1990. Within the time and resource constraints of this assessment, the tables below represent what appear to be the most pertinent pieces of easily available data. Data specific to Seattle was used when available; in a few cases the best information available was on the King County level. All table headings reflect the geographic scope.

Most of the tables are self-explanatory. They present useful (though not perfect) information. Their analytical value is explored in a later chapter.

Table 1: Number of People Age 55+ in Seattle in 1990 US Census

Age	Number of Persons
55 to 59 years	18,119
60 to 61 years	7,541
62 to 64 years	12,350
65 to 69 years	22,098
70 to 74 years	20,445
75 to 79 years	16,095
80 to 84 years	10,814
85 years and over	9,181
Total	**116,643**

Persons age 55 and over in Seattle comprise about 22.5% of Seattle's 1990 population of about 519,000. Persons over age 65 comprise about 15% of the total.

Table 2: Household Income of People Age 55+ in Seattle in 1990 US Census

	All Households	White Households	Black Households	Asian or Pacific Islander Households	Amer. Indian, Eskimo or Aleut Households	Hispanic Origin Households
Less than $5,000 to $9,999	16,388	12,785	1,853	1,393	259	273
$10,000 to $24,999	23,826	20,222	1,887	1,451	248	238
$25,000 to $49,999	22,360	19,021	1,407	1,685	169	298
$50,000 to $99,999	11,346	9,743	469	1,072	40	119
$100,000 or more	3,424	3,207	69	116	0	78

**Table 3: Number of People Age 65+ in Seattle with
Mobility and Self-Care Limitations in 1990 US Census**

Age and Limitation	Number of Males	Number of Females	Total
65 to 74 years			
Mobility limitation only	552	1,192	1,744
Self-care limitation only	664	795	1,459
Mobility and self-care limitation	639	994	1,633
75 years and over			
Mobility limitation only	1,011	3,180	4,191
Self-care limitation only	589	779	1,368
Mobility and self-care limitation	790	2,290	3,080

About 11% of seniors age 65 to 74 years have some type of mobility or self-care limitation. About 24% of seniors 75 years or older have a mobility or self-care limitation or both.

Table 4: 1990 US Census King County 60+
Ability to Speak English Not Well or Not at All

Ethnic Group	Number of People
White	1,307
African American	38
Native American	14
Asian/Pacific Islander	4,369
Other	100
Total	**5,828**
Hispanic	303

About 2.5% of the King County population age 60 or older do not speak English well or at all.

Additional Demographic Information
1996-1999 Area Plan on Aging
for the Seattle-King County Division on Aging

- A growth rate of 5% was expected in King County in the number of people age 60 and older between 1995 and 2000.

- A person who has attained age 65 can expect to live an average of 18.4 more years to age 83.4.

- Several chronic problems associated with aging are major causes of disability:

  - 49% of older people suffer from arthritis.

  - 26% of the age 65 to 75 age group, and 42% of the 75 or older group are estimated to have hearing difficulties.

  - 7% of the 65 to 74 age group and 11% of the 75 and older group are estimated to have significant visual impairment.

Table 5: Selected Characteristics of People Age 65+
in Seattle Sub-Areas based on 1990 US Census
By Highest Number of People Age 65+

Sub-Area	No. of People Age 65+	No. of People Age 65+ Below Poverty Level	% of People Age 65+ Below Poverty Level	% Age 65+ of Total Sub-Area Population	Share of City Total of Persons Age 65+
Citywide				15.2%	
West Seattle	12,203	749	6.14%	16.4%	29.8%
Northwest	10,140	820	8.09%	17.0%	28.8%
Northeast	8,708	446	5.12%	12.8%	21.3%
Queen Anne/ Magnolia	8,249	342	4.15%	16.6%	21.3%
Ballard	7,696	482	6.26%	18.5%	18.5%
First Hill/ Capitol Hill/ Madison Park	6,054	769	12.70%	14.3%	18.5%
Southeast	5,683	490	8.62%	13.4%	13.4%
North	5,527	314	5.68%	15.9%	13.3%
Duwamish	4,958	591	11.92%	13.3%	10.7%
Central	3,534	693	19.61%	13.7%	10.4%
Downtown	2,810	959	34.13%	22.9%	7.6%
Lake Union	2,434	95	3.90%	9.6%	6.5%

See Appendix D for Map of Sub-Areas for Analysis of 1990 US Census Data
See Appendix E for Distribution of Poverty is Seattle Sub-Areas
See Appendix F for Seattle Housing Authority Units Under Management

Characteristics of Seattle Sub-Areas

Highest Number of People 65+ (in descending order)	Highest Number of People Age 65+ in Poverty (in descending order)	People of Color (of all ages) (in descending order)
West Seattle	Downtown	Southeast (19%)
Northwest	Northwest	Duwamish (19%
Northeast	First Hill/Capitol Hill/Madison Park	Central (13%)
Queen Anne/Magnolia	West Seattle	Northeast (8%)
Ballard	Central	West Seattle-Southwest (7%)
First Hill/Capitol Hill/ Madison Park	Duwamish	Capitol Hill (6%)
Southeast	Southeast	Northeast (6%)
North	Ballard	North (5%)
Duwamish	Northeast	West Seattle-Delridge (3%)
Central	Queen Anne/Magnolia	Queen Anne/Magnolia (3%)
Downtown	North	Downtown (2%)
Lake Union	Lake Union	Ballard (2%)
		Lake Union (2%)

See Appendix D for Map of Sub-Areas for Analysis of 1990 US Census Data
See Appendix G for Distribution of People Age 65+ in Seattle Sub-Areas

Sub-Areas of Seattle With Specific Characteristics of People

High Number of People 65+ **and** High Percent of People 65+ in Poverty **(In descending order averaging the ranking of both characteristics)**	High Percent **Minority Age 60+ in 1980 Census** (in descending order) **(Note: Different boundaries than 1990 sub-areas)**
Northwest	International (67.3%)
West Seattle	Central (59.0%)
First Hill/Capitol Hill/Madison Park	Beacon Hill (36.6%)
Northeast	Rainier Valley (22.4%
Downtown	South Central (13.6%)
Ballard	Delridge (7.6%)
Southeast	Downtown (7.5%)
Queen Anne/Magnolia	Capitol Hill (4.9%)
Central	
Duwamish	
North	
Lake Union	

Current Seattle Senior Technology Resources

The City of Seattle Executive Services Department compiled a database and map of sites in the City where community members have access to computers and other technology.[7] New access sites are developing rapidly and will be added to the city database as they are identified.

Senior technology services in Seattle identified include:
- Computer training and access sites
- Online information and referral
- Telephone companion
- Online intergenerational programs

Descriptions of a few of these programs are contained in Appendix H (which describes examples of local, regional and national initiatives.) Computer labs are the most prevalent technology resource for seniors. These are described below in the summary of Senior Access and Training Sites. These sites provide either computer terminal access only (i.e. Neighborhood Service Center sites) or access and training.

Online Information and Referral

The Mayor's Office for Senior Citizens provides basic senior information via its website on the city Public Access Network. Ralph Pfister provides an additional range of senior information and links via his independent organization, King County Seniors Online. There were no Seattle/King County specific web-based forums or chats identified.

Telephone Companion

The Linkage Program links seniors together by telephone to provide a safety check-in and ongoing companionship. Lloyd Shelley, a forum participant, coordinates this program.

Online Intergenerational Programs

The Computer Pals program of Intergenerational Innovations was the most extensive effort to use online communications to link seniors with youth. (For more detail, see Appendix H.) Other individual initiatives have also occurred, including e-mail connections, although this study did not permit in-depth surveying. One example is a set of web pages profiling Indian elders developed by youth at the Seattle Indian Center.

---

[7] This information is available in print or online at http://www.ci.seattle.wa.us/tech/techmap.htm

Summary of Senior Access and Training Sites[8]

The sites available to seniors include the libraries, senior centers, community centers and community based training centers. Some neighborhood service centers are also available for Internet access. Of the labs located at senior service facilities, 6 of these are senior centers and one is a senior residence.
(See Appendix I for list of access and training sites and Appendix J for a list of senior centers in King County.)

Of 70 known community computer sites located in the City of Seattle, 42 are available to seniors and 21 provide some senior specific programming (29% of the total). Seven computer labs are located at senior service facilities (8% of total).[9]

The senior specific programming includes training or facilitated lab time dedicated to senior citizens. Below is a breakdown of services by neighborhood district.

NEIGHBORHOOD DISTRICT	Access sites available to seniors	Sites with senior specific programming	Sites with Internet Access
Capitol Hill	2	1	2
Central	12	7	11
Delridge	3	1	3
Downtown	3	2	3
Duwamish	0	0	0
Lake Union	3	1	2
North	3	2	3
Northeast	2	1	2
Ballard	1	0	0
Northwest	2	0	2
Queen Anne/Magnolia	0	0	0
Southeast	7	3	6
Southwest	5	3	5
TOTAL	43	21	39

---

[8] Information for this section is derived from information provided by the Mayors Office for Senior Citizens, individual site visits with some centers and the Community Technology Site Map developed as one of the Citizens Technology Literacy Projects, as of March, 1998.

[9] This data represents only sites within the City of Seattle. There are other access and training sites within King County that are not represented here. There are at least 10 identified non-Seattle access sites, not including the King County libraries. Of these, there are at least 7 senior facilities known to provide some level of computer training and access.

This site data does not include commercial access sites, such as the Speakeasy Café and RAIN sites. Speakeasy has 9 Internet cafes with free access to text only Internet browsing.

In some cases, a lab may be nearby, but no seniors and computing program has been developed. The Chinese Information Service Center is one example of this scenario; they do not have trainers or a senior curriculum, but would like to develop a program. At least 4 senior centers are holding or planning to hold classes at nearby computer labs. For instance, the Central Area Senior Center is holding classes at the Rotary Boys and Girls Club. Jefferson Park brings seniors to the Delridge Community Center.

Staff and volunteers at four programs using other facilities noted that computers on-site at senior facilities were valuable because they provide exposure and a safe environment for newcomers whom are receiving other senior services.

Training

The vast majority of courses available to seniors would generally be considered to be basic skills. These include an introduction to computers, word processing (MS Word or Wordperfect), spreadsheets (Excel) or finance (Quicken), database (Access) and Internet browsing/searching. Senior specific courses include Internet for Seniors and Genealogy. Many of the libraries are offering a specific computerized card catalog searching course. Web authoring and document publishing trainings are available for seniors at very few sites.

Trainers are either volunteer or paid. Seniors are providing training at a number of centers.

Equipment

Based on the database and site visits, the range and quality of equipment appears to vary greatly. Center facilities are generally equipped with between four and ten computers in various states of working order. Most of the centers have relied on donated used equipment and very few of the senior centers are providing "up-to-date" Pentiums. For instance, Southeast Senior Center is operating with 386's and Windows 3.1, as are a few other centers. Talmadge Hamilton House has one PC operating Windows '95. West Seattle Senior Center is operating with a loaned computer from the Health Care Finance Administration. At least four of the senior specific sites are not networked.

Internet Connectivity

Internet connectivity is a significant problem in many of the centers and one that is in flux. At least three of the senior specific sites have only a single modem or are trying to have one installed. All of them are considering wireless modems but do not currently have money budgeted for an ISDN line nor do they have the technical staff to design and install a network. The senior centers with higher band width are generally those co-located with another facility such as a community center, a larger agency or a school.

Local, Regional and National Initiatives

There are literally hundreds of options for possible projects to increase senior technology literacy and access. Every day, more ideas and opportunities are identified and more people are introduced to information technology.

To helped inform the process of identifying what types of programs or services the City of Seattle could or should fund within this project, Madrona Resource Associates (MRA, a local public policy consulting firm) conducted a limited investigation of what is currently being done to improve information technology literacy and access among seniors locally, regionally and nationally. Over a two week period, MRA conducted research via telephone and Internet, using a survey form tailored to match the one being used by Citizens Technology and Telecommunications Advisory Board members for their interviews. MRA worked with the City's Community Technology Planner to identify an initial list of contacts and leads. These sources lead to dozens of references, of which 26 were determined to be of direct relevance and included in the research results.

Overall research results are described below. A brief summary of and contact information for each initiative is included in Appendix H to this report. A more detailed description of each initiative is available from the Technology Division of the Seattle Executive Services Department or via the City's web site, <www.ci.seattle.wa.us/tech>.

Categories of Activity

The initiatives analyzed in this research fall into several categories of activity, with many fitting into more than one category (see table below):

1. The most common type of program or service is an ***access and training site*** that provides basic computer instruction and training, either partially or exclusively for seniors. Of the 26 initiatives described, 15 fit within this category.

2. Eleven initiatives consist of or include a ***resource web site*** intended to serve as an information resource for seniors.

3. Six can be described as ***advocacy/representation*** efforts, seeking to provide seniors or another age group with a voice in how the information age is to proceed.

4. Three initiatives focus on ***accessibility***, making technology more available to those with physical impairments or challenges.

5. Three are ***intergenerational*** in nature, providing activities that link seniors with youth.

6. Two include a focus on providing ***infrastructure***, the hardware, software, wiring, etc. needed to put information technology to work for seniors.

7. One includes an ***academic research*** component, investigating how seniors learn to use information technology.

	1	2	3	4	5	6	7
Local Initiatives							
Creative Retirement Institute, Edmonds Community College	û						
Northhaven Computer Learning Center	û						
SeniorNet of Puget Sound	û						
Wallingford Community Senior Center	û				û		
Regional Initiatives							
Generation Connection Society	û		û		û		
Kennewick Senior Center Computer Learning Center	û						
Lifetime Connections Computing Seminars	û						
Multnomah (OR) Community Television	û						
Oregon Museum of Science and Industry	û	û					
National Initiatives							
Acorn Public Housing Complex	û					û	
ASNet, NY State Division on Aging		û				û	
BEV-Seniors, Blacksburg Electronic Village	û	û			û		
Bobby		û		û			
Center for Information Technology Accommodation		û		û			
ElderWeb		û					
Environmental Alliance for Senior Involvement		û	û				
Global Action on Aging		û	û				
Grand Rapids Community Media Center	û						
Junior Summit 1998			û				
"Kids as Agents of Change"	û						
National Center for Accessible Media		û	û	û			
National Institutes of Health/SPRY	û						û
Senior News Network		û					
Senior Health Foundation	û						
Talk City Seniors Center		û					
University of the Third Age			û				

1 = access and training site, 2 = resource web site, 3 = advocacy/representation effort, 4 = accessibility, 5 = intergenerational, 6 = infrastructure, 7 = academic research

Analysis Questions and Findings

What Facilities Are Available to Seniors?—Judging from the initiatives identified in this research, by far the most common type of program being offered to seniors is a computer lab or learning center where they can acquire the basic skills of using computers and the Internet. Very few programs offered access and training for other types of information technology. Exceptions included a few media centers that provide training in radio, television and web broadcasting, a program that uses video conferencing and one that uses telephone conference calling to reach the homebound.

What Applications Do Seniors Use?—The list of software applications being used by seniors in these programs would not differ greatly from those used by the general population. They include (from most commonly used to least commonly used) word processing, e-mail, web browsing, financial, games, spread sheeting, database, web publishing, desktop publishing, audio and video conferencing, newsgroups and chatting (an Internet search revealed over 50 chat forums devoted to senior topics).

What Do Seniors Use These Applications For?—Respondents state that seniors are using computer applications for much the same purposes as other users: to write correspondence and other documents, to gather information and learn, to better organize data and to automate time-consuming tasks such as doing taxes. E-mail is especially desirable because it helps seniors stay in touch with friends, relatives and (for grandparents) grandchildren. Word-processing and tax/financial software is also highly valued, as is genealogy software.

What Most Enables or Attracts Seniors to Use Computers?—Respondents report that seniors are attracted to computers for many of the same reasons as other people: they open up new horizons, make certain tasks easier and facilitate communication. One program reports that they use Apple Macintosh machines because these are easier for seniors to learn than Windows-based machines. Word of mouth from same-aged friends, user-friendly lab set-ups and easy-to-comprehend menus, senior lab instructors and assistants, quality one-on-one instruction and continuing support were all cited as important factors.

What Are The Largest Barriers To Senior Use Of Computers?—Fear of the unknown was often mentioned as a big barrier, along with fear of damaging the equipment and a reluctance to try. One respondent said that many seniors are afraid of, and/or indignant to, "technology" of any kind. Accessibility was also frequently mentioned, usually referring to the need to make computers and other forms of information technology more accessible to those with physical impairments such as poor vision, hearing, inability to grip, operate or make fine movements. But computer technology is also made inaccessible to seniors because of a prohibitive cost of purchasing the hardware and software, along with a lack of adequate transportation and/or mobility necessary to get to public access sites and facilities.

Is Or Was There A Government Role?—Most initiatives were run by non-profits, academic facilities or community groups. However, government grants and other forms of financing were involved at least to some degree in most initiatives, providing funding for hardware, software or connectivity. One program, ASNet, provides a hardware and software "backbone" which individuals and organizations can use to improve senior access to information and services.

Where Is The Funding Coming From?—Resources to operate these initiatives are coming from a diverse group of sources including grants, private assistance, use fees, cable franchises and bartering. As mentioned above, government grants played a role in many of these initiatives, but not all. Many programs rely on financial support and/or in-kind donations of hardware, software, technical training and support, etc. from foundations or the private sector. One respondent reported that this was because companies were waking up to the huge potential market for their products that seniors represent. Programs adjacent to centers of high-tech industry, such as Silicon Valley and the Seattle area, seemed to be especially benefiting from contributions from these firms and their employees. A number of programs were partially or completely self-supporting, based on fees for membership and services provided. Cable television franchise fees support at least one other program, Multnomah Community Television. Several programs were engaging in reciprocal arrangements with other organizations such as getting free space in a school in return for members providing tutoring to students. Some programs expressed concern that money is available to get started, but sustaining operating funds is difficult.

Is There Volunteer/Community Involvement?—Almost every initiative was partially or totally reliant on volunteer involvement. Very few computer instructors are getting paid for their efforts, usually only the ones who also run the facilities. Programs which concentrate on training senior volunteers so they can train their peers (such as the Wallingford Senior Center and SeniorNet of Puget Sound) report favorable results and increased interest.

Do Participants "Produce" Or Just "Consume" Information?—Most programs were still at the stage of teaching seniors how to become familiar with the world of information technology and to consume its information. Only a few were engaging seniors in producing information for distribution to others. Exceptions included programs where seniors created and mounted their own web sites or web-based materials, such as oral history and local nostalgia projects. Also, several programs, especially the intergenerational ones, involved seniors in doing on-line research and presenting their findings via the web and/or teleconferencing. One program featured seniors as "web jockeys," running a web-based call-in show.

Lessons Learned: Program Components

The City of Seattle has identified four major components of programs that facilitate technology literacy and access for seniors: 1) Involvement; 2) Equipment and Connectivity; 3) Training; and 4) Staff and Volunteers. The initiatives studied during this research provide a number of instructive lessons about what helps or hinders utilizing each of these

components as part of a successful strategy to put computers into the hands of seniors and make sure they get used. Those lessons are considered below.

Involvement—Involvement can and should take many forms if a program is to be successful. For example, the BEV-Seniors use Listserv technology to provide involvement via Internet discussion groups on senior-focused topics, but they also hold monthly meetings, recognizing that electronic communication is not a substitute for face-to-face interaction. Locating a program within a facility or service that seniors are already using for another purpose (such as an assisted living facility, senior center or museum) is also a good strategy for promoting involvement. Several programs (including BEV-Seniors, The Generation Connection Society and "Kids as Agents of Change") have recognized that including an intergenerational component is a spur to involvement for many seniors. In general, a program is more likely to be successful in promoting broad senior involvement if technology is used as a tool to achieve the program's focus, rather than being the focus itself. EASI's environmental mission and Global Action of Aging's advocacy efforts are examples of this.

Equipment and Connectivity—One important lesson from these initiatives, especially the experience of senior-focused learning centers such as the Wallingford Senior Center, is that how the equipment is set up is as important as what equipment is available. A rudimentary system designed with the needs and interests of seniors in mind is of more use than an advanced system that is not set up for seniors. Another lesson is that it is important to try to facilitate connections between learning centers and the home, for example by providing Internet access. SeniorNet and others report that seniors who can continue their studies and activities via a home-based connection are much more likely to retain knowledge and interest. OMSI and others put their curricula on-line so participants can review and complete assignments from home. A project budget can disappear quickly when it is used to purchase equipment, but several programs are learning that they can get the equipment they want through federal and state programs if that equipment is then used, at least in part, to provide seniors with access to information relevant to that federal or state program.

Training—As mentioned before, training seniors to use computers is the single most common activity in these initiatives. Perhaps the most consistent message relating to this component was that of "seniors training seniors"—it is very productive to train seniors so that they can be the ones to train other seniors. Like most groups, seniors were reported to learn best from their peers. The Acorn Public Housing project also combined computer training with job skills training, hoping to provide not only literacy and access, but also employment.

Staff and Volunteers—Successful initiatives, such as the Wallingford Senior Center, relied on a mix of paid staff and volunteers. An entirely volunteer effort is severely limited in its potential size and scope, but volunteers are almost always necessary to keep the organization from becoming top-heavy or insupportable in the medium and long term. One program, ElderWeb, turns every participant into a volunteer by creating an on-line technical support forum in which members solve each other's computer use problems. In general, the more reliant an initiative is on volunteer leadership, the greater the need to divide leadership responsibilities among volunteers so that no one's burden is unreasonable.

Most of these successful initiatives were also expanding their staff and volunteer capabilities by affiliating and collaborating with other organizations pursuing similar goals.

Selecting a Seattle Project or Projects

Proposed criteria for selecting projects for the Senior Technology Literacy and Access Project were developed by the staff and consultants working on this project. The list was presented at the Senior Advisory Forum, where participants were asked to indicate which criteria they believed were most important.

The proposed criteria are listed below. Those items considered particularly important by the Forum participants are marked with an asterisk at the end of the item.

Criteria for Selection

- Enhances what already exists, rather than duplicating it or getting in the way of it.*

- Serves seniors with low incomes.*

- Serves seniors who currently have limited access to and knowledge about computers.*

- Provides self-determination by seniors and a role for involvement of senior and other volunteers in shaping or administering the program/service.*

- Increases resources to reach the short-term goals by attracting other funding or resources.*

- Is consistent with the Mayor's Office for Senior Citizens mission to develop, promote, and maintain programs that create a sense of community and strengthen people's ability to be self-reliant.*

- Allows effective and appropriate use of City funding.

- Meets the short-term goals for the Senior Literacy and Access Project.

- Can be copied in the future without much additional work.

- Is consistent with Seattle-King County Aging and Disability Services' policies, which include:

  - Targeting services to vulnerable elderly people and to individuals with the greatest social and economic needs (includes racial or ethnic minorities, low income, 75 years or older, limited-English speaking, and disabled).

  - Providing culturally appropriate services that include contracting with minority-owned agencies, hiring of bilingual/bicultural staff, and targeting outreach to minority communities.

  - Ensuring that program design, locations, and service delivery are responsive to the needs of special populations, including people who are physically, mentally and developmentally disabled, sensory impairments, sexual minorities, substance abusers, homeless, and people with AIDS.

Analysis of Options

To select recommended effective uses of the funds available to the Seattle Senior Technology Project, the information and research gathered was analyzed, sorted by the following topics:

- Type of project
- Desired target audience
- Type of location
- Purposes for seniors' use of technology
- Encouraging or attracting seniors
- Challenges and barriers to seniors' use of technology

In addition, a list of best practices for program design is included.

For each topic, the analysis is presented in the following format:

Input (may include research, survey, Senior Advisory Forum)

⬇

Synthesis of the Input

⬇

Application of Criteria

⬇

Recommendations
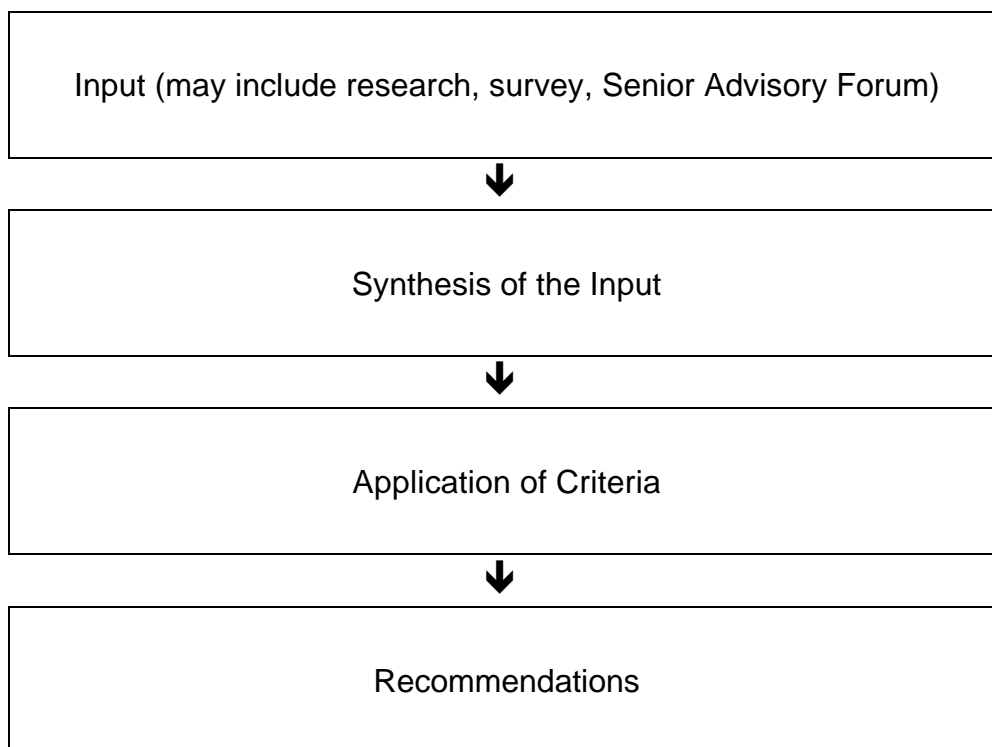
Analysis: Type of Project

Input (in order of highest preference/most commonly mentioned)		
Research	*Survey*	*Advisory Forum*
■ Computer lab or learning centers where seniors can acquire the basic skills of using computers and the Internet. ■ Introduce computers as part of organized programs to which seniors are attracted, such as classes on retirement planning, literacy promotion, health, volunteer service training, and business training.	■ EQUIPMENT: Provide funding to programs to purchase equipment or software ■ TRAINING AND ASSISTANCE: Provide training on new methods or techniques to those already training seniors ■ AWARENESS: Create and distribute a directory of successful computer technology programs serving seniors ■ TRAINING AND ASSISTANCE: Offer assistance to organizations about how to develop useful and fun programs using technology	■ AWARENESS: Create and distribute directory of places where seniors have access to equipment and training ■ EQUIPMENT: Help low income seniors obtain computers ■ TRAINING AND ASSISTANCE: Provide training on new methods or techniques to those already training seniors ■ TRAINING AND ASSISTANCE: Funding for instruction ■ EQUIPMENT: Offer assistance to programs about what kind of computers to buy, best ways to hook up to the Internet, etc. Advocate for discounts for seniors.

↓

Synthesis of Input

The choices offered in the survey and at the Advisory Forum all incorporated some type of capacity-building approach. They addressed ways to enhance the infrastructure (equipment, training, awareness, knowledge sharing) rather than direct programs.

No clear consensus emerged from the input received. Rather, a variety of options were supported and specific factors likely to increase the success of projects were defined. Both survey respondents and Forum participants offered strong support for projects that increased training and assistance and improved equipment at many locations. It appears that those asked believe that the City should look for investments that provide a resource to many new and existing technology access sites. They identified various types of technical assistance and help with equipment as some of the best ways to do this.

Forum participants were very **clear that any project should include access to and use of the Internet as an essential component of enhancing technology literacy and access for seniors**.

↓

Analysis: Type of Project (con't)

Application of Criteria
Any of the types of projects preferred by survey respondents and Forum participants could meet the proposed criteria, depending on the target audience and design of a particular project. On the other hand, none of the project types demonstrated an extraordinary application of the criteria. In order to further refine the type of project(s) to fund, it will necessary to consider other parameters of this analysis.

↓

Recommendations
The Senior Project funds should be used to increase training/assistance and/or improve equipment at many locations. Based on specific input at the Forum, **any project should include access to and use of the Internet** as a component of enhancing technology literacy and access for seniors.

Analysis: Target Audience

Input		
Research	*Demographics*	*Existing Seattle Sites*
■ Income and education are the most important variables in terms of computer ownership. ■ People of color, who tend to have lower incomes and educational levels, may be disadvantaged in their access to and use of computer technology. ■ A gender gap in usage of computer technology seems to be closing, although males are more likely than females to use computers and Internet services. ■ There is a significant age gap in Seattle between people over age 55 and the total population in their use of computers at home, at work, and at other locations.	■ In 1990, there were 116,643 people over age 55 in the city. ■ In 1990, 5,828 people over age 60 spoke English not well or not at all. Almost half of older people suffer from arthritis; of those 65 to 74, 26% and 7% respectively, have hearing & vision problems. ■ Sub-areas of Seattle with a high number of people 65+ and a high % of people 65+ in poverty are Northwest, West Seattle, First Hill/Capitol Hill/Madison Park, Northeast, Down-town, Ballard, & Southeast. ■ Sub-areas with a high percent of minority people age 60+ in 1980 were International, Central, Beacon Hill, Rainier Valley, and South Central.	■ Neighborhood districts with the fewest sites available to seniors are Ballard, Northeast, Northwest, Delridge, Downtown, North, Lake Union, and Southwest. ■ Neighborhood districts with the fewest sites with senior specific programming are Ballard, Northwest, Capitol Hill, Northeast, Delridge, and Lake Union.

⬇

Synthesis of Input

In addition to reach seniors with low incomes, any use of the project funds should consider the extent to which it will reach people with limited English speaking ability and will serve those with fine motor, hearing, and vision impairments.

The following sub-areas of Seattle warrant attention based on one of the major goals of this project (reaching seniors with low incomes and/or little access to or knowledge about computers):

High # of People 65+ and High % 65+ in Poverty	High Percent of Minority People 60+ in 1980 (with closest equivalent 1990 sub-area)	Fewest Sites Available to Seniors	Fewest Sites with Senior Specific Programming
Northwest West Seattle First/Capitol Hills Northeast Downtown Ballard Southeast	International (Downtown) Central (Central) Beacon Hill (Duwamish) Rainier Valley (Southeast and Duwamish) South Central (Duwamish)	Ballard Northeast Northwest Delridge Downtown North Lake Union Southwest	Ballard Northwest Capitol Hill Northeast Delridge Lake Union

No sub-areas fall into levels of highest need in all four categories. The sub-areas that have a high number of people 65+ and a high percent 65+ in poverty **and** which have a high percent of minority elderly people **or** limited sites for seniors are: **Northwest, Northeast, Downtown, Ballard, West Seattle/Southwest/Delridge, First Hill/Capitol Hill, and Southeast**. Minority populations over age 60, based on the information available, are largely concentrated in Downtown, Central, and Southeast.

⬇

Application of Criteria

The proposed criteria call for reaching low income seniors, seniors who currently have limited access to and knowledge about computers, and other sub-populations. In many cases these are the same people; in some cases the people who fall in each category are different. One example is the Central Area, which has a high number of people age 65 or older yet also has the highest number of known technology sites with access to seniors and senior specific programming.

If the Citizens Technology and Telecommunications Advisory Board determined that one target audience was of higher priority than others, the demographic information available could help identify how to best reach that group or groups.

⬇

Recommendations

Projects should serve some or all of the six sub-areas (**Northwest, Northeast, Downtown, Ballard, West Seattle/Southwest/Delridge, First Hill/Capitol Hill, and Southeast)** which have a high number of people 65+ and a high percent 65+ in poverty **and** which also have a high percent of minority people **or** limited sites for seniors. Although projects may serve other areas as well, emphasis should be placed on serving sub-areas that meet these parameters.

Analysis: Type of Location

Input	
Survey	*Forum*
Gave a low rating to the idea of "in seniors' own homes" as an option for increasing the percentage of seniors whom has computer access and literacy. Were not asked to compare this option to other settings When asked about the distribution of resources, ranked the choices in the following order: 1. Offer more senior-focused program at existing sites 2. Improve equipment at existing sites 3. Increase number of sites	When asked where is the best place for seniors to have access to computers, ranked the choices in the following order: 1. In their homes 2. At senior only programs 3. At general community locations When asked about the distribution of resources, ranked the choices in the following order: 1. Increase number of sites 2. Improve equipment at existing sites 3. Offer more senior-focused program at existing sites

⬇

Synthesis of Input

Those responding to the survey and those at the Advisory Forum had **widely differing views** on the distribution of resources. The input on the type of location (home, senior center, general community center) may reflect the belief that although it would be best for seniors to have computers in their homes, it is not a cost-effective way to increase the percentage of seniors who have computer access and literacy.

As some equipment options become more affordable (Web access through television; simplified, low cost computers, etc.) this view may change. In the meantime, it appears that. The choice of type of location may depend on other aspects of the proposed projects.

⬇

Application of Criteria

The proposed criteria include consideration of enhancing or raising the standards of what already exists and of addressing the goal to encourage seniors and those of other ages to work together. These criteria would suggest leaning toward projects at existing sites and those at general community locations. However, input is mixed on this component and criteria related to target population would lean toward creating new sites.

⬇

Recommendations

Projects at any type of location (home, senior centers, general community centers) will **have some value and have some support** from those who offered input. There is **no clear choice** of type of location.

Analysis: Purposes for Seniors' Use of Technology

Input (areas of highest use/benefit)		
Research	*Survey*	*Advisory Forum*
- Communication (correspondence, e-mail, newsgroups, chatting) - Access to information and resources - Financial analysis, record-keeping - Entertainment/games - Organize information through databases - Desktop and Web publishing - Audio and video conferencing	- Self improvement - Access to information and resources - Record family history/ cultural heritage - Communication - Financial information and record-keeping - Entertainment - Improve motor skills - Connect with young people	- Communication - Access to information and resources - Self improvement - Relaxation/enjoyment/ hobbies - Earn income - Overcome limitations/ address special needs

↓

Synthesis of Input

Seniors are **using technology and computers for much the same purposes as other users**. Seniors use a variety of applications, with no one or two that stand out.

As noted earlier, participants at the Forum felt very strongly that the ability to use the Internet is essential to seniors' increased technology literacy and access.

↓

Application of Criteria

The proposed criteria indicate a preference for projects that build a dialogue about seniors and computers; encourage senior groups to work together; and encourage seniors and those of other ages to work together. Applications such as chatting and intergenerational e-mail relationships are examples of ways to fulfill these criteria.

The proposed criteria include a desire to create a sense of community for seniors and to strengthen their ability to be self-reliant. Applications such as communication through e-mail and chatting help provide a sense of community. Uses which lead to self improve-ment, access to information and resources, earning income, and overcome fine motor or other limitations help seniors remain self-reliant.

The proposed criteria also address providing services to seniors with the greatest social and economic needs and ensuring the program design is culturally appropriate and addresses the needs of special populations. These criteria call for applications that reduce isolation, alleviate economic needs, maintain and enhance culture and heritage, and accommodate special needs (larger keyboards, large monitor, and adaptations for sounds, applications in various languages).

↓

Recommendations
Projects would ideally lead to seniors' **learning and using a wide variety of applications for a wide variety of purposes**. Within that broad spectrum, however, projects should place special emphasis on projects which build a dialogue around seniors and computers, encourage seniors and those of other ages to work together, create a sense of community for seniors, strengthen the ability of seniors to be self-reliant, maintain and enhance culture and heritage, and help overcome physical limitations and other special needs. These purposes are consistent with the City's overall role and place priority on issues that may receive limited attention from others.

Analysis: Encouraging and Attracting Seniors

Input (factors most likely to encourage or attract)		
Research	*Survey*	*Advisory Forum*
■ Open new horizons ■ Make tasks easier ■ Facilitate communication ■ Word of mouth from same-age friends ■ User-friendly lab set-ups and easy to comprehend menus ■ Senior instructors ■ One-on-one instruction ■ Continuing support after a class	■ Personal motivation (curiosity, wanting to know more) ■ Entertainment, novelty ■ Desire to feel connected to other people ■ Offers an easy way to do work/tasks ■ Small classes in neighborhood, taught by older people ■ Free or low cost training ■ Flexible class set-up and curriculum	■ Personal motivation (need technology for specific task; encouraged by peers, family, children, or grandchildren, desire to be up-to-date) ■ Easy way to learn (free or low cost training, convenient time and location for training, classes geared for seniors, being given a computer)

⬇

Synthesis of Input
Input from all three sources is very consistent. **Many of the factors that encourage seniors to use computers are internal**. In many cases, seniors will be self-motivated because of a general desire to know more or because they perceive that technology will allow them to do some of their tasks easier and more quickly. The desire to be connected with other people also appears to be a strong motivator. Other factors attracting seniors to learn about and use computers are external – they can be tailored to what works best for seniors. These factors revolve around the **cost, location, staffing, and teaching approach for training**. Seniors have strong prefer-ences about what works well for them (senior instructors, low cost, nearby location, personal assistance, space and equipment that respond to specific needs of seniors).

⬇

Application of Criteria
The input received will be helpful in devising strategies to meet the criteria of reaching seniors who currently have little access to or knowledge about computers. This informa-tion can be used to shape outreach and marketing strategies for all seniors.

⬇

Recommendations
All projects should address and incorporate outreach and marketing approaches which specifically address both the internal (desire to know more, do existing tasks more quickly, be connected with other people) and external (senior instructors, low cost, nearby location, personal assistance, programs designed specifically for seniors) factors which encourage and enable seniors to learn about and use computer technology.

Analysis: Challenges/Barriers to Seniors' Use of Technology

Input	
Research	*Survey*
- Fear of the unknown, fear of damaging the equipment. - Reluctance to try. - Fear of and/or indignant to technology of any kind. - Lack of adaptations for impairments such as poor vision, hearing, and ability to grip, operate or make fine movements. - Prohibitive cost of purchasing hardware and software. - Lack of transportation and/or mobility to get to access and training sites.	- Lack of one-on-one training. - Difficulty driving to classes at night when volunteer instructors are available. - Small size of icons, keyboards, and monitors. - Fear of something new, fear of failure, fear of breaking the machine. - High cost of classes and equipment. - Intimidation of salespeople when shopping for computers. - Difficulty of learning to use the keyboard, developing typing skills.

⬇

Synthesis of Input
Input from research and the survey is very consistent in identifying barriers to seniors' use of technology. Programs must be aware of and seek to **overcome fears and must offer adaptations of equipment and scheduling** that work for seniors. **The high cost of equipment and difficulty traveling to a learning site** are more difficult barriers to overcome.

⬇

Application of Criteria
As with input on factors that attract seniors to learn and use computers, this information will be helpful in devising strategies to meet the criteria of reaching seniors whom currently have little access to or knowledge about computers. It can be used to shape outreach and marketing strategies for those seniors, as well as all seniors.

⬇

Recommendations
All projects should address ways that they will help overcome the barriers to seniors' use of computer technology. In many cases, it will be important to begin with basic skills such as typing and understanding a computer. Instructors should anticipate and address fears. Programs should strive to be affordable and to provide adaptations for visual, hearing, or physical impairments.

Best Practices for Program Design

In collecting information for this project, a number of best practice ideas for programs and services helping seniors learn about and apply technology were uncovered. Those practices (some of which are addressed in the preceding analysis) are presented here in order to capture concepts that could strengthen new and existing programs.

Awareness/Motivation/Marketing

- Seniors will accept and use tools that help them achieve their personal goals; they need to see how technology does this.
- Locate programs within a facility or service that seniors are already using (assisted living facility, senior center, or museum).
- Use technology as a tool to achieve a program's focus, rather than being the focus itself.

Equipment

- Consider how laptop computers can address barriers.
- Seek discounts of equipment and services from manufacturers.

Training and Assistance

- Encourage volunteer trainers to team with paid staff; effective and helps attract other funding/resources.
- Consider opportunities for seniors to produce information, not just consume it.
- Facilitate connections between learning centers and the home, so that seniors can continue their studies via a home-based connection.
- Group people with like interests, such as finances or genealogy.
- Identify seniors who can provide leadership, teaching, and outreach.

Capacity Building

- Build a dialogue that keeps informing next steps and circulating new ideas.
- Encourage collaboration—encouraging senior groups and seniors and others with similar goals to work together to share resources and ideas.
- Use the growing interest in seniors as a market as a way to obtain equipment, Internet services, and training from industry sources.
- Seek funding from federal and state sources to obtain equipment that provides seniors with information relevant to specific federal or state programs.
- Engage in reciprocal arrangements with other organizations, such as getting free space and use of computers in exchange for providing tutoring or office assistance.

⬇

Recommendations
Proposals for use of City funds should address how they will incorporate and remain current about best practices, both those identified in this report and others relevant to the proposed project.

Summary of Recommendations

In gathering information, reviewing research, and hearing from people in Seattle involved in seniors' interest in technology literacy and access, no specific project, type of project, or provider stood out as a clear choice. Rather, a variety of options were supported and specific factors likely to increase the success of projects were defined.

Therefore, it seems that for most projects, the City of Seattle will be best served by issuing a Request for Proposals (RFP) for projects. The RFP should specify which components are required and which are desirable, but optional.

The recommendations from each element analyzed above are summarized below:

Type of Project
The Senior Project funds should be used to increase training/assistance and/or improve equipment at many locations. Based on specific input at the Forum, **any project should include access to and use of the Internet** as a component of enhancing technology literacy and access for seniors.

Target Audience
Projects should serve some or all of the six sub-areas (**Northwest, Northeast, Downtown, Ballard, West Seattle/Southwest/Delridge, First Hill/Capitol Hill, and Southeast)** which have a high number of people 65+ and a high percent 65+ in poverty **and** which also have a high percent of minority people **or** limited sites for seniors . Although projects may serve other areas as well, emphasis should be placed on serving sub-areas that meet these parameters.

Type of Location
Projects at any type of location (home, senior centers, general community centers) will have some value and have some support from those who offered input. There is no clear choice of type of location.

Purposes for Seniors' Use of Technology
Projects would ideally lead to seniors' learning and using a wide variety of applications for a wide variety of purposes. Within that broad spectrum, however, projects should place special emphasis on projects which build a dialogue around seniors and computers, encourage seniors and those of other ages to work together, create a sense of community for seniors, strengthen the ability of seniors to be self-reliant, maintain and enhance culture and heritage, and help overcome physical limitations and other special needs. These purposes are consistent with the City's overall role and place priority on issues that may receive limited attention from others.

Encouraging and Attracting Seniors
All projects should address and incorporate outreach and marketing approaches which specifically address both the internal (desire to know more, do existing tasks more quickly, be connected with other people) and external (senior instructors, low cost, nearby location, personal assistance, programs designed specifically for seniors) factors which encourage and enable seniors to learn about and use computer technology.

Challenges/Barriers to Seniors' Use of Technology
All projects should address ways that they will help overcome the barriers to seniors' use of computer technology. In many cases, it will be important to begin with basic skills such as typing and understanding a computer. Instructors should anticipate and address fears. Programs should strive to be affordable and to provide adaptations for visual, hearing, or physical impairments.

Best Practices for Program Design
Proposals for use of City funds should address how they will incorporate and remain current about best practices, both those identified in this report and others relevant to the proposed project.

<u>Observations about Recommendations from All Elements</u>

The picture that emerges from the analysis and recommendations of all of the elements above is one of needing some type of effort that can serve as a catalyst and resource for the variety of existing needs and those which will undoubtedly unfold as the technology explosion continues. The reasons behind the emergence of this picture seem to be:

- **Many of the issues analyzed are interrelated**; addressing isolated pieces of a program or service is unlikely to be helpful. An effective program or service will need to consider every aspect of its design, from location to hours to type of equipment to staffing to marketing and outreach to adaptations for those with physical limitations.

- **The fast pace of change in the technology arena requires ongoing learning**; solutions that work today may be replaced by cheaper, easier (or more complex) solutions tomorrow.

- **Having a means for information exchange will increase the speed and quality of learning**; in a field this new, much of the learning comes from trial and error by those in hands-on situations rather than from research or academic studies.

<u>Proposed Projects Based on Recommendations</u>

Based on the information and research gathered, the input received, and the synthesis and recommendations above, staff of the Seattle Executive Services Department Technology Division, Michael Kern of Madrona Resource Associates, and Nancy Ashley developed some specific project options for consideration by the Citizens Technology and Telecommunications Advisory Board.

The options can be accomplished in three different ways:

1. Use of existing resources, by the City and others
2. Allocation of Senior Technology Project funds
3. Application to the Technology Matching Fund

In most cases, allocation of Senior Technology Project funds would be most effective through a Request for Proposals (RFP) process. This process will allow any person or organization with ideas on how to achieve the desired result to come forward with their plan. It will also allow an objective process for selecting the most qualified proposer.

Project options are described on the following pages, in a table that indicates how they would be accomplished and which also provides some additional information that may be relevant in the final selection process.

Proposed Projects

Project and Description	Extent to Which Meets Criteria, Including Project Goals	How Accomplished	Estimated Cost	Feasible in 1998?	Requires Ongoing Funding?
1. **Senior Technology Directory:** Create and distribute a directory of places where seniors have access to computers and the Internet and where they can receive technology training and assistance.	Good overall; little to no effect on increased capacity	Existing technology map funds	$5,000 - $7,000	Yes	Some, would need to update
2. **Training Senior Trainers:** Recruit seniors from underserved populations to attend a "senior technology training institute" where participants would learn a variety of computer skills, including Internet uses such as e-mail and chat groups. Each participant would agree to provide a specified number of hours of training to other seniors from underserved populations.	Excellent overall; significant effect on increased capacity, reaching underserved populations, and providing leadership role for seniors	Request for Proposals	$15,000 - $20,000 to recruit for & deliver the training institute	Yes, if process moves quickly	No
3. **Provide Technical Assistance to Enhance Existing Technology Sites for Seniors:** Provide 6-10 hours of technical assistance to sites that currently serve or want to serve seniors. . Assistance would be provided in areas of program design, equipment selection and architecture, grantwriting and community involvement/volunteer development. Priority would be given to sites reaching or trying to reach target populations.	Good overall; modest effect on increased capacity, limited leadership by seniors	Request for Proposals; some assistance from existing City efforts	$18,000 to $35,000, depending on the number of sites requesting assistance	Yes, if process moves quickly	No

Proposed Projects (con't)

Project and Description	Extent to Which Meets Criteria, Including Project Goals	How Accomplished	Estimated Cost	Feasible in 1998?	Requires Ongoing Funding?
1. **Create a Purchasing Cooperative:** Organize individuals and programs willing to solicit donors or discounted pricing for equipment and services to programs serving seniors and for individual (low-income) seniors . Important components to include would be computers, modems, software, Internet service, and individual e-mail accounts.	Good overall; medium effect on increased capacity; unlikely to reach low income seniors who could not afford even discounted equipment and services	Request for Proposals to organize; advocacy by existing groups and policy-makers	$5,000 to $12,000 in staff or consultant time to organize advocacy and set up eligibility system	Not certain, depends on pace of organi-zation, advocacy, response	Some, would need to maintain contacts and eligibility system
2. **Provide Equipment and Internet Connections:** Purchase computers, hardware upgrades, modems, and software to enhance existing sites that provide technology access and training to seniors. Provide funding for initial telephone and other costs to obtain Internet services. Priority would be given to sites reaching or trying to reach target populations.	Good overall; immediate direct service project; limited effect on increased capacity; limited leadership by seniors	City could administer or Request for Proposals to manage; Projects may also be eligible for Technology Matching Fund	Any amount from $10,000 to $35,000	Yes	Sites would need to demon-strate ability to pay for ongoing telephone & Internet fees
3. **Provide Increased or Enhanced Staffing**: Pay for short-term staffing increases or enhancements at existing sites to offer specific classes or programs. Priority would be given to sites reaching or trying to reach target populations and to those who would use this opportunity to increase ongoing capacity (for example, by training more volunteer trainers).	Good overall; immediate direct service project; limited effect on increased capacity; limited leadership by seniors	Request for Proposals process; Projects may also be eligible for Technology Matching Fund	Any amount from $10,000 to $35,000	Yes	No

For any of these options, the scope should be tailored to:

- Fit the resources available.
- Select elements that can be achieved in 1998 and leave a positive impact even if no further funding is available.
- Give priority to some or all of the six sub-areas of the City (Northwest, Northeast, Downtown, Ballard, West Seattle/Southwest/Delridge, First Hill/Capitol Hill, and Southeast) which best meet the criteria for target audience.
- Give priority to target audiences within the selected sub-areas.
- Increase access for people with physical impairments, such a vision or hearing losses, inability to grip, limited fine motor skills, etc.
- Ensure that services are culturally competent and relevant.
- Document learnings and make them easily available to others.

Next Steps

This report will be presented to the Senior Project subcommittee of the Citizens Technology and Telecommunications Advisory Board in early April 1998. The subcommittee will make a recommendation to the City on which project or projects to implement.

Implementation of Project Options

To implement one or more of the project options, the Advisory Board and the City of Seattle should act quickly to make a final determination of the project(s) to pursue. For those that require a Request for Proposals, a relatively non-complex process should be used, which allows creativity in how to accomplish the project goals within the available time and resources. The selection process should also occur as promptly as possible, so that the maximum time is available for implementation before the end of 1998.

Recommendations for Further Study

As noted at the beginning of this report, the assessment process described here was not comprehensive due to limited time and resources. There is much more to learn about senior technology services, opportunities, and needs in Seattle. Future planning efforts would benefit from:

- Continued data collection and tracking.
- Inclusion of a larger sample of opinions on needs and priorities through a survey or other methods (those involved in the survey for this report indicated there was more to be gained through this approach).
- Increased ability to compare demographic information and other data across City sub-area boundaries, either through standardization of sub-area boundaries or creation of tools that allow accurate comparisons.
- Increased sample size for annual Citywide residential survey, so that findings related to racial/ethnic groups can be generalized.
- Additional research about local, regional, and national sources of funding for senior technology projects.
- Consideration of partnerships between senior technology and disability technology efforts where there are similar opportunities and needs.

This report will be made available to others interested in increasing seniors' technology literacy and access. The results of the project or projects funded will

also be made widely available, and will hopefully serve as a foundation for additional efforts.

Appendices

Appendix A: People Attending Senior Advisory Forum

Shelley Adato   Seattle Public Library

Jennifer Bailey   Delridge OnRamp

Rosie Brantley

Delores Davis   SeniorNet

Carl Hicks   Mayor's Office for Senior Citizens

Bill Hunziker   Senior Volunteer Ballroom Dance Program

Kristin Jacobson

Miller Lee

Woodrow Malone   Senior Rights Assistance Program

Carolyn Morgan   A Little Company
   www.alittlecompany.com

Ruth Nordeng   Mayor's Office for Senior Citizens

Laura Pelger   Intergenerational Innovations Resource Center

Ralph Pfister   King County Seniors Online
   www.seniornewsmagazine.com

Jerri Shelley

Lloyd Shelley   Linkage Program

Doug Smith   West Seattle Senior Center

Mary Lynn Strickland   Southeast Senior Center

Bob Summerrise

Rebecca Williams

Appendix B: People Contacted for Local Survey

Jennifer Bailey	Delridge OnRamp/Career & Computer Access Center
Janet Byers	Northwest Senior Center
Nigel Day	South Park Senior Program
Diana Hovland	Parks Department-Senior Programs
Daisy Lau-Leung	Chinese Information Service Center
Jean Leiberman	Stevens SPICE
Doug Smith	Senior Center of West Seattle
Josh Sutton	Meredith Mathews East Madison YMCA
Carlye Teel	Northwest and Greenwood Senior Center
Misty Thomas	Southeast Senior Center

Senior Technology Literacy and Access Project
Summary of Survey Results
February 25, 1998

Volunteer members of the CTTAB conducted telephone and in-person interviews during late February 1998 to gather information and input from organizations around the city about how and to what extent older people in Seattle are participating in computer programs and services. A total of 10 interviews were conducted. The results are summarized below.

Organization Type and Number Surveyed

Senior services	4
Community/ethnic agency	5
Computer lab/training center	1

Population served/target audience

Total number (unduplicated) served per month: 8,778
Average per agency responding: 1,097

Average % of population served over age 55:   72.1%

Average % of population served over age 75:   35.1%

Average % of those over 55 who are low income: 64.3%

Average % of those over 55 who are racial/ethnic minorities: 36.9%

Average % of those over 55 who are limited English speaking: 14.9%

Average % of **all** served with disabilities: 33.0%

Use of computers

Of the people over age 55 that you serve, what percentage would you estimate currently know how to use a computer?

Average response: 9.7%

In what ways, if any, do **people over age 55 use computers** as part of your services/programs?	
Program/Service	**Describe how computers are used (training, find information, etc.)**
Class	12 seniors, one-on-one
Training	
Classes – outside teacher	6 week courses once a week; beginning, intermediate, advanced
Classes	Connecting with library – tied in with use and knowledge of computer.
Free orientations, 1-hour per month.	1/3-1/2 of every class is seniors. Internet Access and Word Processing. To write letters, send and receive e-mail, organize religious mission work in one case, conduct international trip planning in another case.
Miscellaneous	Correspondence, e-mail, personal financial management
Not in place	

Considering the population of people over age 55 that you serve, what do you believe are the **three most important/beneficial ways in which they use or could use computers**?

(The number of organizations providing a similar answer is noted in parentheses following the responses.)

- Good confidence builder; helps them feel modern; getting comfortable with technology generally, which they need to use in many contexts but may avoid; personal satisfaction (4)

- Knowledge; expand services and information to seniors through the Internet, such as Access rides and health information (4)

- Family histories with scanned photos and personal history; record local history; preserve information which might be lost; preserve cultural heritage (3)

- Corresponding with relatives and friends; one person at the YMCA sends baby pictures weekly to infirm parents in Hawaii who will never be able to travel (3)

- General use (teaching); connect to the world and stay alert and informed (3)

- Organizing business, budgets, financial services (2)

- Entertainment; social opportunity (2)

- Improve motor skills

- Word processing

- Intergenerational meeting with local youth

In what ways, if any, **would you like to use computers** as part of your services/programs to people age 55 and over if you had additional resources?

Program/Service	Describe how you would like to use or increase the use of computers
Senior Lab	Create senior chat rooms and training; genealogy; family history; write books; word processing
Offer more classes	
Increase awareness of technology	
Computer training/access	Internet access; more machines-more training; train people to do office work
Outreach	Laptops
Resources to teach	Should be availabe at all 23 Parks Department Community Centers
	Less formal than "user groups", but group people with like interests--for example, genealogy
	Expand the availability of the 6 week Introduction to Computer class, assistance with marketing and operational costs.
English as a second language/naturalization help	
Cultural development	
Self help	
Involve more people in current programs	Encourage them to use their computer skills in office jobs to supplement pensions.
Training	Windows 95 is important, more computers-ability to train more seniors and access for those who can't afford it.
Printing capability/scanner	Need a fast, clean printer, everything is donated.
Have connected terminal for Social Security information	No need to log on. Social Security is considering a kiosk approach to get away from their 800 number.
Municipal senior site	Big, well labeled buttons. Simplicity. Functionality.
E-mail	Become better connected with government; increase participation in local activities.
	Identify seniors who can provide leadership, teach, perform more successful outreach.

What are the three largest barriers to providing the additional programs/services mentioned? (The number of organizations providing a similar answer is noted in parentheses following the responses.)

- Money (class fees); funding; space (8)
- Trainers/instructors; staff time (7)
- Upgrade the equipment; lack of equipment (2)
- Building the relationships with seniors to get them to the site; senior leaders could best bridge this
- Accessibility
- Grant presently funds career development programs so senior programs can't be developed on the same basis
- In our center, seniors tend to be Asian-American; youth tend to be African-American; cultural differences mean than intergenerational support doesn't just happen

Considering the population of people over age 55 that you serve, what do you believe are the **three factors that most enable or attract them to use computers**?

- Sense of keeping up to date; wanting to know more; curiosity; intellectually stimulating
- Entertainment; novelty
- Communal aspects, feeling connected to other people; interaction with younger people; get them out of the house; social action
- Family contacts; family members encourage them
- Easy way to do work; computers might be a tool to resolve writing needs relative to arthritis or other difficulties; word processing; manage investment portfolio
- Small classes in their neighborhood, taught by older people and sensitive to seniors
- Free or low cost
- Flexible class setup and curriculum

Considering the population of people over age 55 that you serve, what do you believe are the **three largest challenges/barriers to senior use of computers**?

- Training/trainers; need one on one – don't want to be in big class
- Seniors can't drive to center at night when volunteers are available
- Icons and keyboards are small; size of monitor
- Fear of something new; intimidated by technology until they take a class
- Access, because of price, and intimidation by salespeople when shopping for computers. Sometimes seniors have bought computers and then been stumped with set-up and usage
- Ignorance
- Learning the basics of keyboarding; typing skills, it is like trying to learn a new language; fear of failure; fear of breaking the machine

On a scale of 1 to 5, with 1 being not at all useful and 5 being very useful, **how useful would the following options be to increasing the percentage of seniors in Seattle who have computer access and literacy?**

Option	Average Response
Offer more senior focused programs at existing computer sites.	4.9
Improve the equipment at existing sites.	4.7
Increase the number of community sites where seniors have access to use computers.	3.9
Help seniors get computers in their homes.	3.0

Other suggestions:
- Access in senior housing; make it available to the public also, but promote especially to seniors.
- Do better with technological support in centers to overcome frustration of working alone.

On a scale of 1 to 5, with 1 being not at all useful and 5 being very useful, **how useful would the following options be to increase your capacity to help seniors that you serve increase their use of and knowledge about computers and information technology**?

Option	Average Response
Provide funding for our organization to purchase equipment or software and/or to pay for Internet fees	4.8
Provide technology training for trainers.	4.2
Provide a directory of successful computer and technology programs serving seniors	4.2
Create a directory of places where seniors can get computer access and training.	3.8
Offer advice to my organization about planning senior programs using technology.	3.8
Provide technical assistance to my organization about hardware selection, Internet connections and design.	3.5

Other suggestions:
- Please share the results of this survey
- Staff funding
- Equipment; need printers
- Scholarships for seniors to take classes

Additional comments:
- Recommended contact: The Bluebills (Boeing Retirees)
- Need scanning equipment, printer, scuzzy II card for little scanner, seniors need specialized equipment (mouse ball, etc.).
- We have 2 locations; we need separate locations at times. We are a multi-purpose agency with ages from 8 to 80's so we need separate space for some programs.
- There are a lot of access programs in West Seattle, bun not many focus on seniors (senior problem – cultural barrier is different).
- People in training programs usually know where other programs are and make referrals.

Seniors Technology Literacy and Access Project
Survey Form

Person conducting interview _____ Date _____

Organization type (circle one): Senior services   Community/Ethnic agency   Computer lab/training center

Person interviewed _____ Organization _____

Title _____ Phone no. (   ) _____

E-mail _____

Population served/target audience (reason people come to you; age range; key characteristics) (1)	% of population served over age 55: ____% (3)
	% of population served over age 75: _____% (4)
	% of those over 55 who are low income: ___% (5)
	% of those over 55 who are racial/ethnic minorities: _____% (6)
	% of those over 55 who are limited English speaking: ____%(7)
Total number (unduplicated) served per month: _____ (2)	% of **all** served with disabilities: _____% (8)

Of the **people over age 55** that you serve, what percentage would you estimate currently know how to use a computer? _____**%** (9)

In what ways, if any, do **people over age 55 use computers** as part of your services/programs? (10) (11)	
Program/Service (class, email, youth & seniors project, etc.)	**Describe how computers are used (training, find information, etc.)**

Considering the population of people over age 55 that you serve, what do you believe are the **three most important/beneficial ways in which they use or could use computers**? (12)

1.

2.

3.

In what ways, if any, **would you like to use computers** as part of your services/programs to people age 55 and over if you had additional resources? (13) (14)

Program/Service	Describe how you would like to use or increase the use of computers
1)	
2)	
3)	
4)	

What are the three **largest barriers** to providing the services you just mentioned?
Please be as specific as possible (15)

1)

2)

3)

Considering the population of people over age 55 that you serve, what do you believe are the **three factors that most enable or attract them to use computers**? (16)

1.

2.

3.

Considering the population of people over age 55 that you serve, what do you believe are the **three largest challenges/barriers to senior use of computers**? (17)

1.

2.

3.

On a scale of 1 to 5, with 1 being not at all useful and 5 being very useful, **how useful would the following options be to increasing the percentage of seniors in Seattle who have computer access and literacy?**

	Not at all useful				Very useful
Increase the number of community sites where seniors have access to use computers. (21)	1	2	3	4	5
Improve the equipment at existing sites.	1	2	3	4	5
Offer more senior focused programs at existing computer sites. (22)	1	2	3	4	5
Help seniors get computers in their homes. (23)	1	2	3	4	5
Other: (25)	1	2	3	4	5
Other: (26)	1	2	3	4	5

On a scale of 1 to 5, with 1 being not at all useful and 5 being very useful, **how useful would the following options be to increase your capacity to help seniors that you serve increase their use of and knowledge about computers and information technology**?

	Not at all useful				Very useful
Create a directory of places where seniors can get computer access and training (20)	1	2	3	4	5
Provide technical assistance to my organization about hardware selection, Internet connections and design. (21)	1	2	3	4	5
Provide technology training for trainers. (22)	1	2	3	4	5
Offer advice to my organization about planning senior programs using technology (23)	1	2	3	4	5
Provide funding for our organization to purchase equipment or software and/or to pay for Internet fees (25)	1	2	3	4	5
Provide a directory of successful computer and technology programs serving seniors (24)	1	2	3	4	5
Other: (26)	1	2	3	4	5
Other: (27)	1	2	3	4	5

Additional comments: (continue on back of page, if necessary): (28)

City of Seattle

SUB-AREAS

(On Census Tracts)

NORTH

NORTHWEST

BALLARD

NORTHEAST

LAKE UNION

QUEEN ANNE /MAGNOLIA

CAPITOL HILL

DOWNTOWN

CENTRAL

WEST SEATTLE

DUWAMISH

SOUTHEAST

```
0   0.5   1   1.5   2
MILES
```

Produced by the Planning Department
c. 1993 City of Seattle
February 26, 1993
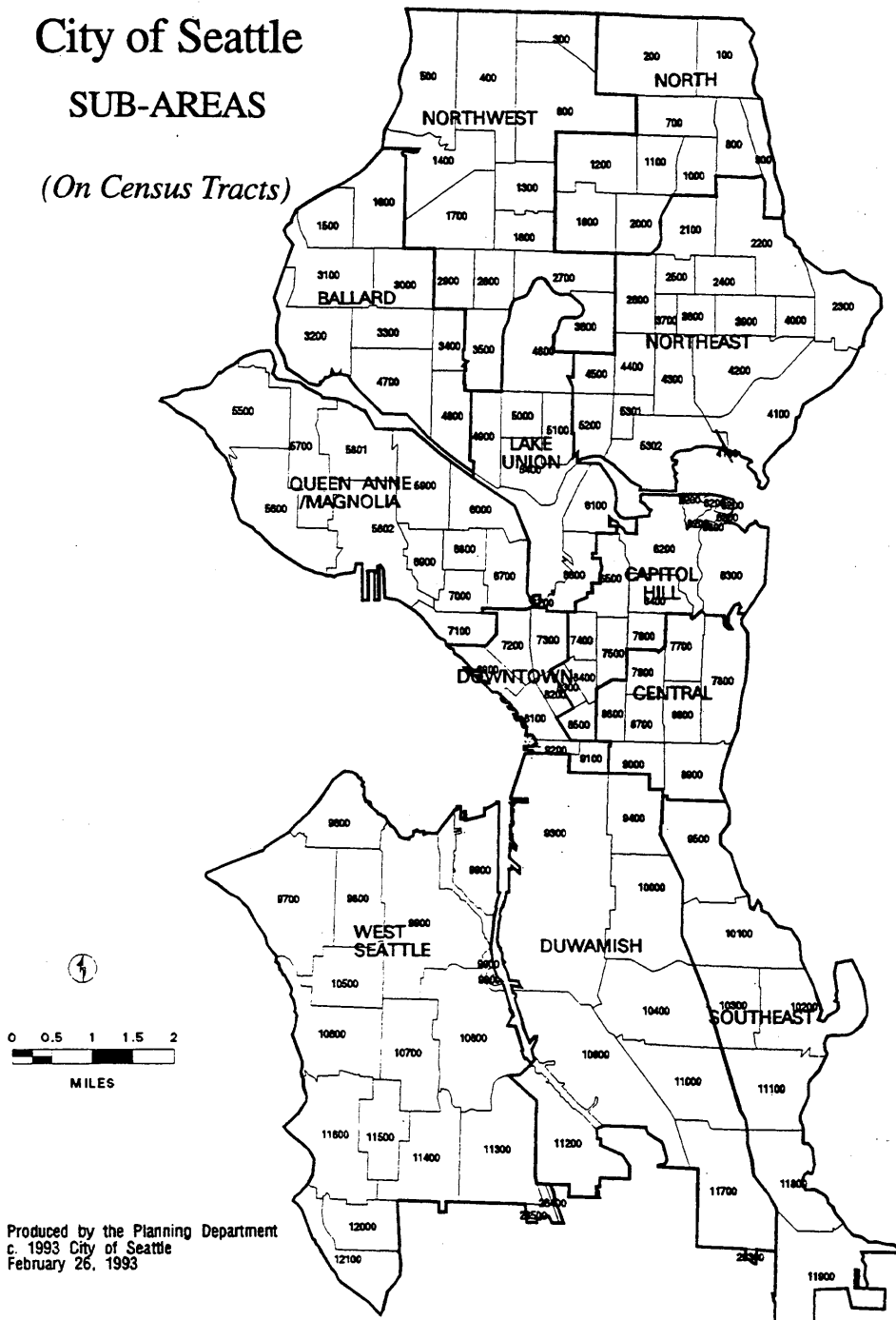
Appendix E: Distribution of Employed Residents and Poverty in Seattle Sub-Areas

THE DISTRIBUTION OF EMPLOYED RESIDENTS AND POVERTY, 1990

District Share of City Total:

1. Population
2. Residents of Seattle with Jobs
3. Residents of Seattle with Jobs in Seattle
4. Drive Alone to Work
5. People Living in Poverty
6. People under 18 living in Poverty
7. People over 65 living in Poverty
8. Families Living in Poverty
9. Female Headed Families living in Poverty
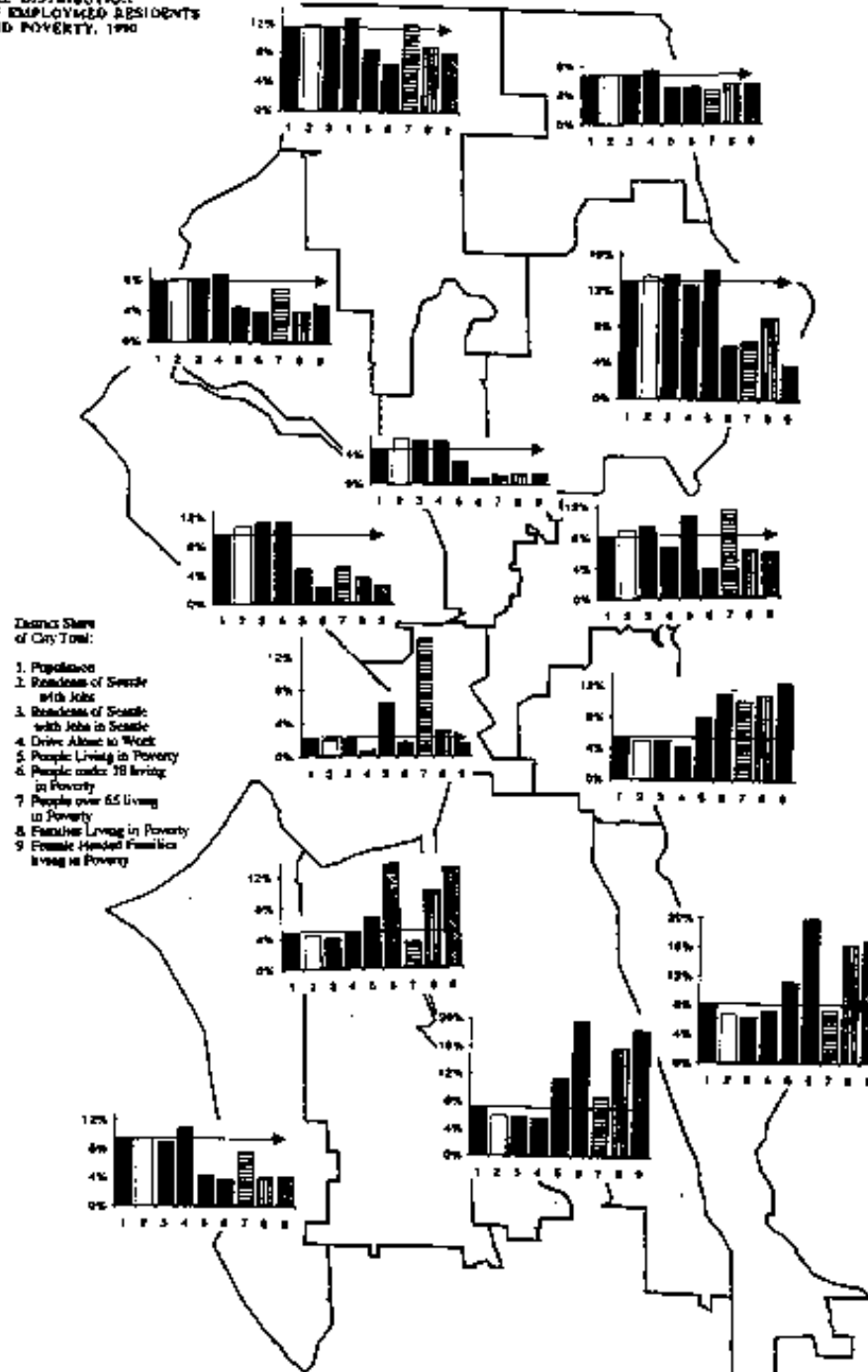
Appendix F: Seattle Housing Authority Units Under Management
(From Seattle Housing Authority 1996 Annual Report)

Neighborhoods

1   Broadview/Carkeek

2   Lake City/Haller Lake

3   Ballard

4   Green Lake/Wallingford

5   University/Ravenna

6   Magnolia

7   Queen Anne

8   Capitol Hill/Madison

9   Downtown

10 Garfield/Madrona

11 Alki/Admiral (West Seattle)

12 Beacon/Rainier Valley

13 Fauntleroy/Highland Park

14 Rainier Beach

Symbol Key

● Federally Subsidized High-rises for elderly, handicapped, and disabled

○ Federally Subsidized Townhouses for families

▮ Federally Subsidized Garden Communities for elderly, handicapped, disabled and families

⊛ Federally Subsidized High-rise for the physically challenged

◆ Local Bond Issue Senior Housing High-rises for elderly, handicapped, and disabled

❖ Section 8 New Construction High-rises for elderly, handicapped and disabled

Tri-Court ●

① ◆ Bitter Lake Manor

Jackson Park House ● ○
Jackson Park Village
② ◆ Pinehurst Court

Lake City House ● ○
Lake City Village

Lictonwood ●

Cedarvale House
● ○ Cedarvale Village

Green Lake Plaza ●

Phinney Terrace ◆

③ Schwabacher House ◆

④ Olmsted ◆ Manor

◆ Ravenna School Apartments

Nelson Manor ◆

Willis House

◆ Blakeley Manor

⑤

Ballard House ● ◆ Sunrise Manor

Fremont Place ◆

● University House
● University West

◆ Fort Lawton Place

◆ Pleasant Valley Plaza ⑦

Keystone House ◆

⑥

West Town View
● Queen Anne ● Heights

⑧

Capital Park ●

Michaelson Manor ◆

◆ Carroll Terrace
● Olympic West

● Denny Terrace
◆ Reunion House
◆ Primeau Place

● Center West
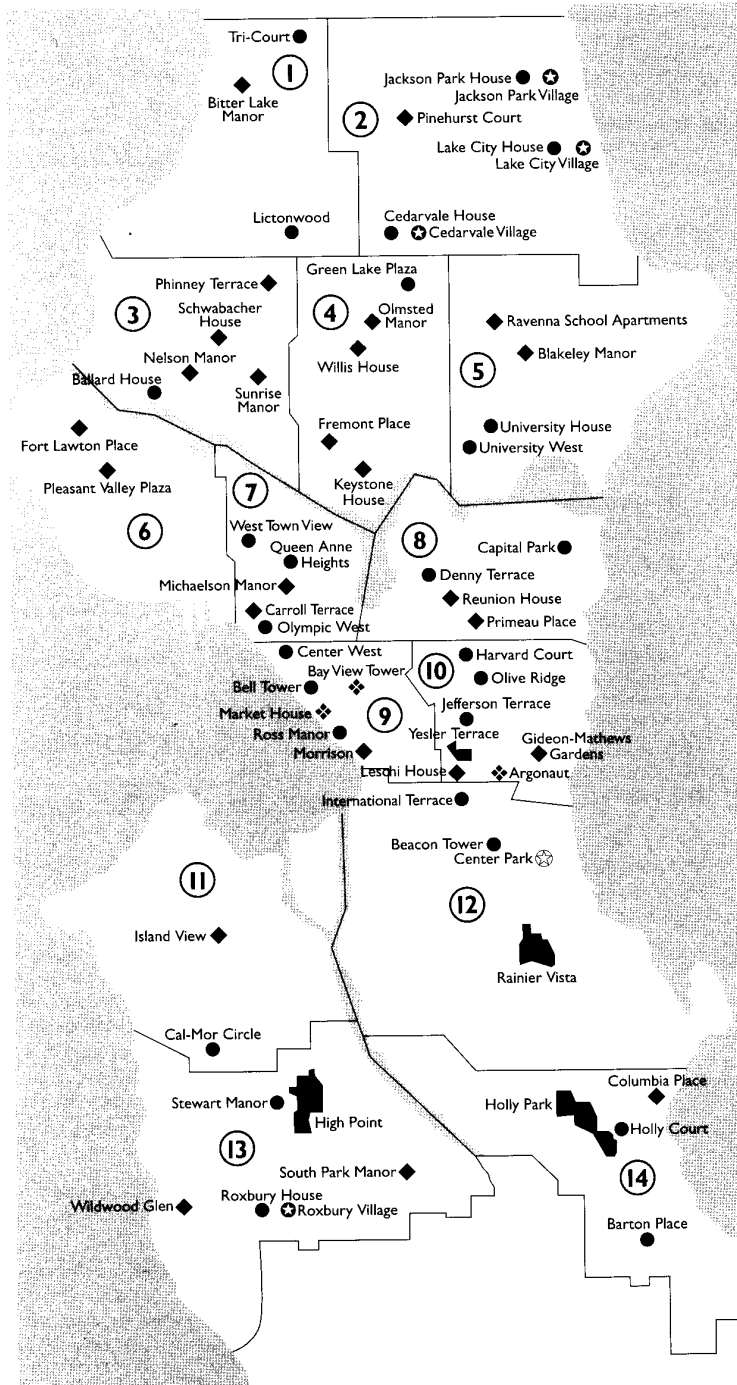Bay View Tower ⑩

◆ Harvard Court
● Olive Ridge

Bell Tower ● ❖

Market House ❖

Jefferson Terrace ●

⑨

Ross Manor ●

Yesler Terrace ● Gideon-Mathews
◆ Gardens

Morrison ◆

Leschi House ◆ ❖ Argonaut

International Terrace ●

Beacon Tower ●
Center Park ⊛

⑪

⑫

Island View ◆

Rainier Vista

Cal-Mor Circle ●

Columbia Place ◆

Stewart Manor ●

Holly Park

● Holly Court

⑬ High Point

⑭

South Park Manor ◆

Wildwood Glen ◆

Roxbury House
● ○ Roxbury Village

Barton Place ●

Public Housing

Name	Address	Type of Housing	Number of Units
Ballard House	2445 NW 57th Street	E/D*	80
Barton Place	9201 Rainier Avenue S.	E/D	91
Beacon Tower	1311 S. Massachusetts	E/D	109
Bell Tower	2215 - 1st Avenue	E/D	120
Cal-Mor Circle	6420 California Avenue SW	E/D	75
Capitol Park	525 - 14th Avenue E.	E/D	126
Cedarvale House	11050 - 8th Avenue NE	E/D	118
Cedarvale Village	11050 - 8th Avenue NE	Family	24
Center Park	2121 - 26th Avenue S.	Disabled	137
Center West	533 - 3rd Avenue W.	E/D	92
Denny Terrace	100 Melrose Avenue E.	E/D	222
Greenlake Plaza	505 NE 70th Street	E/D	130
Harvard Court	610 Harvard Avenue E.	E/D	81
High Point	3000 SW Graham Street	Family/E/D	750
Holly Court	3804 S. Myrtle	E/D	97
Holly Park	7001 - 32nd Avenue S.	Family/E/D	898
International Terrace	202 - 6th Avenue S.	E/D	100
Jackson Park House	14396 - 30th Avenue NE	E/D	72
Jackson Park Village	14396 - 30th Avenue NE	Family	41
Jefferson Terrace	800 Jefferson Street	E/D	300
Lake City House	12546 - 33rd Avenue NE	E/D	116
Lake City Village	12546 - 33rd Avenue NE	Family	16
Lictonwood	9009 Greenwood Avenue N.	E/D	81
Olive Ridge	1700 - 17th Avenue	E/D	107
Olympic West	110 W. Olympic Place	E/D	76
Queen Anne Heights	1212 Queen Anne Avenue N.	E/D	53
Rainier Vista	4500 Martin Luther King Jr. Way S.	Family/E/D	496
Ross Manor	1420 Western Avenue	E/D	100
Roxbury House	9455 - 27th Avenue SW	E/D	151
Roxbury Village	9455 - 27th Avenue SW	Family	60
Scattered Sites	Various	Family	755
Stewart Manor	6339 - 34th Avenue	E/D	75
Tri-Court	720 N. 143rd	E/D	87
University House	4700 - 12th Avenue NE	E/D	102
University West	4544 - 7th Avenue NE	E/D	114
West Town View	1407 - 2nd Avenue West	E/D	59
Yesler Terrace	903 E. Yesler Way	Family/E/D	607

Section 8

Name	Address	Type of Housing	Number of Units
Certificates/Vouchers	Various	Family/E/D	3668
Argonaut**	539 - 23rd S.	E/D	8
Bay View Tower**	2614 - 4th Avenue	E/D	100
Market House**	1531 - 1st Avenue	E/D	51

Senior Housing Program

Name	Address	Type of Housing	Number of Units
Bitter Lake Manor	620 N. 130th	E/D	72
Blakeley Manor	2401 NE Blakeley	E/D	70
Carroll Terrace	600 - 5th Avenue W.	E/D	26
Columbia Place	4628 S. Holly	E/D	66
Fort Lawton Place	3401 W. Government Way	E/D	24
Fremont Place	4601 Phinney Avenue N.	E/D	31
Gideon-Mathews Gardens	323 - 25th Avenue S.	E/D	45
Island View	3031 California Avenue SW	E/D	48
Keystone House	3515 Woodland Park N.	Disabled	32
Leschi House	1011 S. Weller	E/D	34
Michaelson Manor	320 W. Roy	E/D	57
Morrison***	509 - 3rd Avenue	E/D	205
Nelson Manor	2200 NW 58th	E/D	32
Olmsted Manor	501 NE Ravenna Blvd.	E/D	35
Phinney Terrace	6561 Phinney Avenue N.	E/D	51
Pinehurst Court	12702 - 15th Avenue NE	E/D	73
Pleasant Valley Plaza	3801 - 34th Avenue W.	E/D	41
Primeau Place	308 - 14th Avenue E.	E/D	53
Ravenna School Apartments	6564 Ravenna Avenue NE	E/D	39
Reunion House	530 - 10th Avenue E.	E/D	28
Schwabacher House	1715 NW 59th Street	E/D	44
South Park Manor	520 S. Cloverdale	E/D	27
Sunrise Manor	1530 NW 57th Street	E/D	32
Wildwood Glen	4501 SW Wildwood	E/D	24
Willis House	6341 - 5th NE	E/D	42

* Elderly/Disabled
** Section 8
New Construction
*** Acquired in 1974.
Rehabilitated under
SSHP 1984-85

Photos by Karol Hansen of SHA.
Printed on recycled paper.

The Seattle Housing Authority is a municipal corporation that, for purposes of financial reporting, consists of fund entities over which a Board of Commissioners exercises oversight responsibility. The Authority owns, manages, and administers U.S. Department of Housing and Urban Development (HUD) supported housing projects and facilities. Each housing program has one or more Annual Contributions Contracts or Housing Assistance Payment contracts with HUD. In addition, the Authority manages several housing projects that are not necessarily part of the Authority for financial reporting purposes. These projects are owned by outside entities, and SHA receives a management fee for services provided. As a municipal corporation, SHA is exempt from federal income tax and from all state and local property taxes.

The Authority's accounts are organized on the basis of funds, each of which is considered a separate accounting entity. Each fund has a set of self-balancing accounts that are comprised of assets, liabilities, fund equity, revenues, and expenses. Monies received by SHA are frequently accompanied by legal and/or contractual requirements that govern their use and often include special accounting and reporting requirements. SHA uses a combination of accounting and finance reporting policies and procedures conforming to Generally Accepted Accounting Principles as well as those prescribed by HUD for the programs it supports.

The following is a brief description of the major SHA programs:

Public Housing Program: This program provides low-rent housing to persons whose income is less than 80 percent of median. SHA has 36 public housing communities and 783 scattered sites with a total of 6,541 units, which it developed, owns and operates. HUD and City Levy funds provided development financing for these projects, and HUD holds a deed of trust on the properties. HUD provides operating subsidies and funds for modernization and development. The operating subsidy paid to SHA is determined using the federal Performance Funding System. Under this system, the operating subsidy covers the difference between an allowable level of operating expenses and rental income.

Section 8 Certificates: Under this program HUD provides a contracted number of certificates to SHA, which it uses to provide rental payments to landlords for a specific number and type of housing units. The program allows families or individuals with incomes under 80 percent of median to find and lease existing private or nonprofit housing. After inspecting the selected units, SHA assists in negotiating a lease that complies with HUD rules and regulations. SHA receives a fee from HUD for administering this program.

Section 8 Vouchers: This is similar to the Certificate program. The amount of funding that SHA receives from HUD each year is fixed, but the actual number of vouchers to be distributed is flexible. Vouchers allow the tenants some flexibility in determining the amount of income they will spend on rent. SHA receives an administrative fee from HUD for administering this program.

Section 8 New Construction: SHA owns or manages buildings constructed with Section 8 funds. Bayview Tower and Market House are owned and managed by SHA and are subsidized through this program. In addition, SHA administers seven Housing Assistance Payments contracts for buildings constructed by private developers. SHA receives an administrative fee from HUD.

Section 8 Moderate Rehabilitation: This program provides funds to private property owners for rehabilitation of rental units. A 15-year Section 8 Certificate is then issued to the property owner to provide subsidized housing for low-income persons and debt service monies for the property owner. SHA receives a fee for administering this program.

Seattle Senior Housing Program: In 1981, a $48.1 million housing bond issue was approved by Seattle voters to provide approximately 1,000 units of low-rent housing for elderly, handicapped and disabled persons. SHA, through an interlocal cooperation agreement with the city of Seattle, developed and now owns and operates 23 buildings (1,200 units) for this program. In addition, the former Morrison Hotel was remodeled with funds from the bond issue. Heritage House, the final building developed in the program, is owned by SHA and managed by the Sisters of Providence.

Capital Funds: The Capital Improvement Program (CIP) contains funds for capital project expenditures from federal, state and local revenue sources that are related solely to capital projects.

The federally-funded **Comprehensive Grant Program** includes management improvements which are typically operational costs. The costs are included in the CIP to make it easier to track these expenditures as part of the total grant. The Comprehensive Grant Program is a unique funding source for public housing improvements. Allocations of funds are based on Congressional funding levels. In FY 1996, SHA received an allocation of $12.4 million (FY 1995 allocation was $15.2 million).
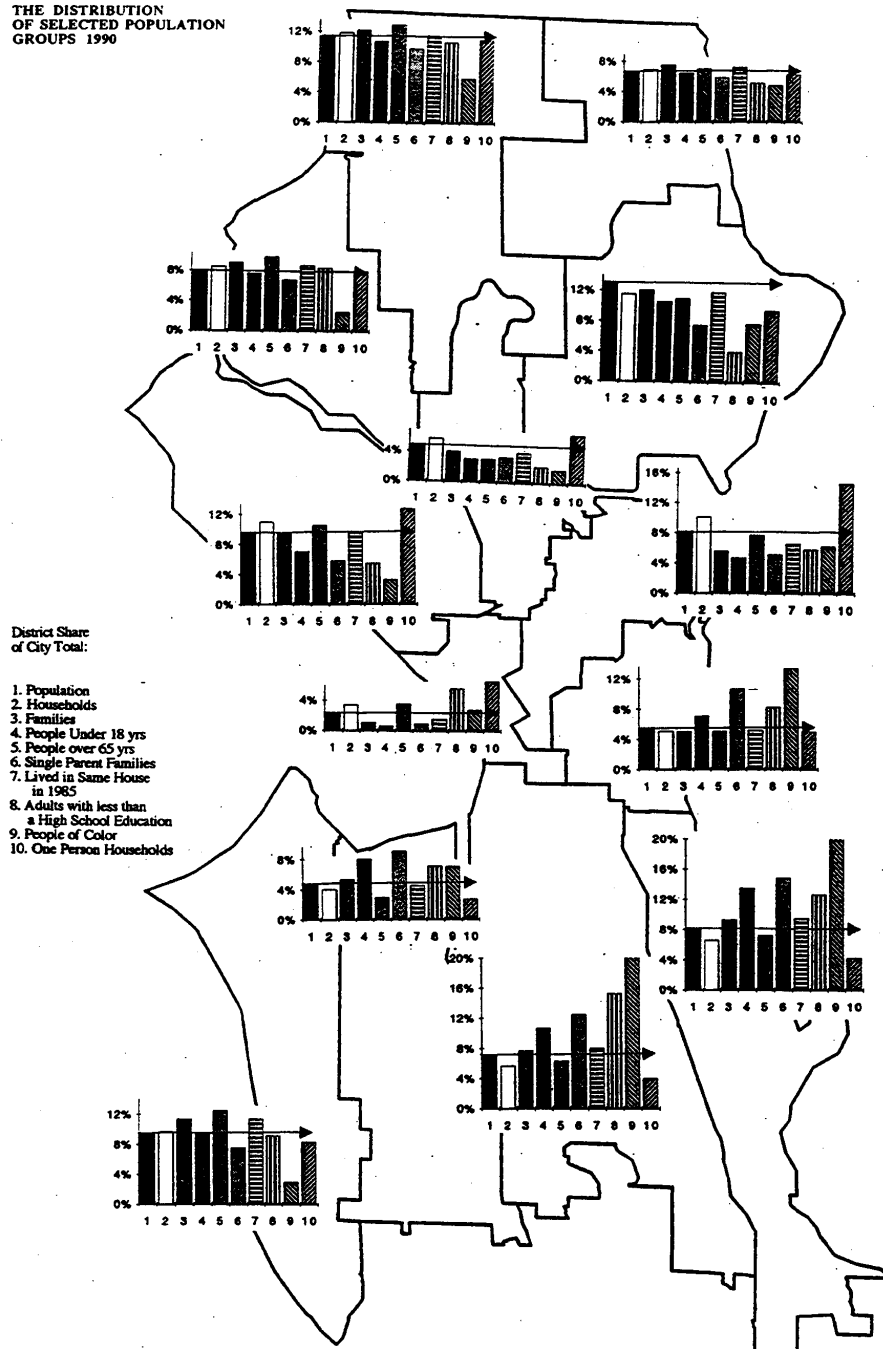
In FY 1996, SHA received $98,000 in **Community Development Block Grant** funds from the city of Seattle. These funds were used to provide facilities in 11 SHA high-rises for visiting agencies to provide on-site health and human services.

Audits: The Washington State Auditor's Office, under provisions of the A-128 Single Audit Act, contracted with the public accounting firm of KPMG Peat Marwick to perform an agencywide audit. The report of this examination was published by the Washington State Auditor and is available to the public.

External Forces: Legislative and regulatory changes have a significant influence on SHA's financial position. Due to heavy reliance on HUD funding, any changes in funding from the federal government have a direct impact on SHA's financial position, including grant income and reserve levels. Because of the federal funding HUD provides, SHA is required to comply with numerous federal regulations and requirements, including those covering accounting, reporting and operational guidance.

Appendix G: Distribution of Selected Population Groups in Seattle Sub-Areas

THE DISTRIBUTION
OF SELECTED POPULATION
GROUPS 1990

District Share
of City Total:

1. Population
2. Households
3. Families
4. People Under 18 yrs
5. People over 65 yrs
6. Single Parent Families
7. Lived in Same House
   in 1985
8. Adults with less than
   a High School Education
9. People of Color
10. One Person Households

Appendix H: Examples of Local, Regional and National Initiatives

Local Initiatives

The *Creative Retirement Institute* is sponsored by Edmonds Community College and affiliated with the Elderhostel Network of Institutes for Learning in Retirement (ILR). CRI endorses the concept that most older adults value education, aspire to lifelong learning and are intense, self-motivated learners, eager to accept the challenge offered by college- level courses. Computer training for seniors is offered jointly by CRI (beginning and introductory classes) and the state-supported Senior Program (more advanced computer applications). <www.cce.edcc.edu/cri/default.html>.

The *Northhaven Computer Learning Center* is one of several such centers in Washington State retirement homes, funded by a grant from the US Department of Housing and Urban Development (HUD). A HUD representative says that over half of Washington's computer learning centers are in senior facilities. Bob Dixon, bobd@altavista.com or bobd@nwlink.com.

SeniorNet of Puget Sound, the local chapter of the national SeniorNet organization, has a computer learning center offering classes for computer owners and non-owners on word processing, spread sheeting, databases, desktop publishing, Internet, Windows, Quicken and genealogy. In exchange for office space, volunteers teach courses in the middle school where SeniorNet is located. Cliff Wuesthoff, President, (425) 746-1392, srnpuget1@aol.com.

The *Wallingford Community Senior Center* offers beginning and intermediate computing classes and the *"Computer Pals"* intergenerational pen pal, socializing and web surfing program with a local elementary school. Marty Boggs, Director, (206) 461-7825, wallsrct@cris.com, <www.cris.com~wallsrct>.

Regional Initiatives

The *Generation Connection Society* is a non-profit society in Vancouver BC that develops educational programs to foster intergenerational communication. They offer computer literacy programs for seniors at community centers and other facilities, with the intent of having seniors upload information on their website and interact with young people and other seniors on topics such as aging and ageism. (604) 731-5399, mail@genconn.bc.ca, <www.genconn.bc.ca>.

The *Kennewick Senior Center's Computer Learning Center* provides both classroom and one-on-one instruction. Courses include basic computer operation, WordPerfect, Windows 95/Windows 3.1, Microsoft Works and Internet. (509) 585-4303, <www.ci.kennewick.wa.us/parks/senior/toc.htm>.

AARP, Microsoft, Sony and CompUSA are co-sponsoring the *Lifetime Connections Computing Seminars* for seniors. A trained and certified Microsoft representative who understands the computing needs of older people leads all sessions. Computers are available for hands-on usage following the presentation. <www.aarp.org/>.

Multnomah (OR) Community Television's computer lab offers classes on computer use, introduction to the Web and some genealogical information. They estimate that 33-50% of the people over age 55 that they serve currently know how to use a computer. J.E. Knox, Engineer/Data Manager, rojoknox@mctv.org.

The **Oregon Museum of Science and Industry (OMSI)** is offering Introduction to Web Surfing classes for senior adults. Members and visitors pay no extra fees to join the classes. Those attending are provided with hands on access and are encouraged to use computers available at OMSI, public libraries, schools, or in their homes to complete on-line self-study assignments. OMSI Information Science Hall, (503) 797-4585, kam@omsi.edu, <www.omsi.edu/educprogs/classes/seniors/>.

National Initiatives

At the **Acorn Public Housing Complex**, the City of Oakland and the IBM Corporation are planning to outfit a 206-unit community with fiber-optic cables, computers in every apartment and a high-tech learning center. Residents will be able to take classes in their homes and those who pass will be certified by IBM and placed in jobs with local companies. Bernard Bowler, IBM Regional Director of Government and Higher Education Accounts.

Funded by a federal Telecommunications and Information Infrastructure Assistance Program (TIIAP) grant, the New York State Office for the Aging is developing **ASNet**, a service backbone via the Internet to: 1) establish linkages among aging service providers for sharing critical client, service and program information; 2) provide remote access for field workers who serve the homebound; 3) provide end users with convenient access to critical information; and 4) empower more mobile elderly and caregivers of the frail to access services independently. <www.aging.state.ny.us/nysofa>.

BEV-Seniors are a diverse group of senior citizens from the Blacksburg area of Virginia whose primary mission is utilize the community facilities of the **Blacksburg Electronic Village** to create a simple avenue for all seniors to access the Internet. Computer skills and other interests are shared via the **BEV-Seniors Listserv**, The **BEV "Seniors Information Page,"** the **"Seniors On-Line Page,"** monthly meetings and the **Senior Computer Learning Center** in the Blacksburg Community Center. The center offers classes for seniors on the Internet and basic computer problem-solving skills. In addition, the Seniors Association sponsors four levels of computer classes for seniors through the New Media Center at Virginia Tech. One of the BEV-Senior's first undertakings with the center was the **Youth-Seniors Project**, which set up communication via e-mail between seniors and second-graders at Margaret Beeks School. Joy Herbert, BEV Senior Programs Supervisor, joyboy@bev.net, <www.bev.net/community/seniors/>.

Bobby is a free web-based service that helps make web pages accessible to people with disabilities. After the user types in the location (URL) of a web page, Bobby examines it and reports on its accessibility shortcomings. Bobby was created at **CAST (Center for Applied Special Technology)**, a non-profit organization founded to

expand opportunities for all people—especially those with disabilities—through the innovative uses of computer technology. <www.cast.org>.

The **Center for Information Technology Accommodation (CITA)** is a technical demonstration and resource center assisting federal agencies to achieve maximum utility in IT architecture and public service applications for Americans whose contributions to society reflect broad life-experience differences (disability, language, aging, location, culture, income, etc.). It has created *Managing Information Resources for Accessibility*, a primer featuring an overview of universal access policy from a federal perspective. Susan Brummel, Director, susan.brummel@gsa.gov, <www.itpolicy.gsa.gov/>.

ElderWeb is an on-line community of older adult computer users founded by the Arts and Science Division of Grant MacEwan Community College in Edmonton, AB. For an annual fee, members have 24 hours/day, 365 days/year access to other members to post messages and receive solutions to computer use problems. Knowledgeable individuals who can consult professionals in the ElderWeb office monitor discussion groups. Peter R. Brown, Project Administrator, (403) 497-5506, prbrown@elderweb.org, < www.elderweb.org/>.

The **Environmental Alliance for Senior Involvement's (EASI)** mission is to promote in senior Americans an environmental ethic that results in expanding their knowledge, commitment, and active involvement in protecting and caring for our environment for present and future generations. EASI's web site features on-line discussion groups, over 150 environmental links and an electronic newsletter. <www.easi.org/>.

Based in New York City, **Global Action on Aging** is an international organization that works to insure a good life for older people world wide. It reports on older people's needs and potential and brings together people of all generations to advocate. GAA maintains electronic mailing lists and its web site contains papers and publications, links to related web sites, lists of upcoming events and material about the human rights of older persons. <www.globalaging.org/>.

The **Grand Rapids Community Media Center** provides training in radio, television, and information technology; also access to the equipment necessary and multi-media transmission possibilities including cable TV, broadcast radio, and the Internet. It estimates that 10% of its clientele are seniors. Dirk Koning, Executive Director, (616) 459-4788 ext. 101, <www.grcmc.org>.

For the **Junior Summit 1998**, 1000 children from every country in the world will be selected via a video, photo, musical and art contest to receive a computer and Internet connection. They will participate in a six-month on-line forum and then choose 60 of their own to attend a six-day summit in Massachusetts to explore technology and other subjects. These delegates will present the positions they develop to world leaders of industry, government and education and follow up with local action projects with local mentors. While not a seniors project, this is an example of an effort to incorporate into the mainstream an underrepresented age group's views on technology. Justine Cassell, Organizer, jrsummitt@media.mit.edu, <www.jrsummit.org>.

Funded in part by another TIIAP grant, the **Rogers and Holland (TX) Independent School Districts' "Kids as Agents of Change" Program** teams 300 seniors with 1,300 poor, rural children. Each participant gets an e-mail address, Internet access and 50 hours of technology training. The teams use Internet and video conferencing to discuss and research physical and mental health, adult literacy, agriculture, finance, investment, college, etc. They discuss their results with a "teleconference mentor" and may follow up with a local campaign on their issue. Carol Ann Bonds, (817) 642-3802, cabonds@tenet.edu.

The **National Center for Accessible Media's Web Access Project** at WGBH Boston researches, develops and tests methods of integrating access technologies (such as captioning & audio description) and new tools into a web site, making it fully accessible to blind or deaf users. Geoff Freed, (617) 492-9258, geoff_freed@wgbh.com, <www.wgbh.org/ncam>.

Funded by the **National Institutes of Health**, **SPRY** conducted a nine-month Internet Training Program to determine whether older adults have the motivation and ability to develop Internet skills to access health care information. 150 retired persons participated and reported increase confidence in their Internet health searching skills. Follow-up data indicate that once given knowledge and training, retirees will pursue searches on their own, and have greater access to pertinent information. The researchers felt more training programs should be developed and implemented to meet this need, and enable retirees to have greater access to information. <www.spry.org/projdesc/PILOT.htm>.

The **Senior News Network**, an on-line collection of senior-focused magazines, is a service of **SeniorCom**., <www.seniornews.com>.

The **Senior Health Foundation (SHF)** is a non-profit, privately funded organization that provides seniors throughout eastern Nebraska and western Iowa accessible, affordable and hands-on computer classes, free Internet access and curricula developed specifically for adults over 50. (402) 457-4115, jlortz@shf.org, <www.shf.org>.

The **Talk City Seniors Center** is a place on the Web where senior citizens can talk about their concerns in discussion groups on seniors' issues including Adult Day Care, Alzheimer's, Caring for an Elderly Parent, Grandparenting, Health, Long Lost Friends, Remembrance & Reminiscences, Retirement and Senior Travels. <www.tcfn.org/seniors.htm>.

One senior activist's personal home page described the London, England chapter of a group called the **University of the Third Age (U3A),** in which seniors organize, conduct and attend their own classes, seminars, weekends and travel studies. This group identifies the four ages of life as "Learn, Earn, Independent, Dependent." "Third Agers" are, for the most part, independent of work and family commitments. Most classes are taught by amateur seniors who rely on life experience or hobbies and research, because older adults need a more Socratic professing that elicits their own knowledge and experience. "U3Aers" also reach out to the home-bound through a monthly book discussion via telephone conference call, supported by British Telecom. <www.thirdage.com/>.

Appendix I: Sites With Senior Computer Access & Training; March 1998
(Based on sites identified in City of Seattle technology map)

Site	Neighborhood District
Senior Specific Sites	
Central Area Senior Center	Central
Mayors Office of Senior Citizens	Downtown
Seniors at Lowell	First Hill/Capitol Hill
Southeast Seattle Senior Center	Southeast
University Talmadge Hamilton House	Northeast
Northaven	North
Wallingford Senior Center	Lake Union
West Seattle Senior Center	West Seattle
Other Sites Available to Seniors	
Bitter Lake Family Center	Northwest
Ballard Family Center	Northwest
Meredith Mathews East Madison YMCA	Central
Chinese Information & Service Center	Downtown
YWCA East Cherry Branch	Central
CAMP/Rites of Passage Experience (R.O.P.E.)	Central
Garfield Community Center	Central
Rainier Vista Boys & Girls Club	Central
Seattle Vocational Institute	Central
Mt. Zion Ethnic School	Central

Seattle Indian Center	Downtown
El Centro de La Raza	Southeast
MidTown Commons	Central
Rotary Boys and Girls Club	Central
Delridge Community Center	Delridge
Union Gospel Mission	Southeast
United Indians of All Tribes	Lake Union
The Village Center	Central
Emerald City Outreach Ministries	Southeast
Electronic Commerce Resource Center	Downtown
High Point YMCA	Southwest
TCI: Northwest Access and Production Center	North
TCI: Community Television (Field Production Office)	North
Seattle Indian Health Center	Downtown
Martin Luther King, Jr. Apartments Computer Learning Center	Southeast
Powerful Schools	Southeast
Project Compute/Rainier Community Center	Southeast
Urban League	Central
Bryant Manor	Central
Chateau Apartments	Central
West Seattle High School	Southwest
South Park Community Center	Delridge
North Seattle Community College	North

South Seattle Community College   Delridge

Neighborhood Service Center Access Terminals

Capitol Hill Neighborhood Service Center   Capitol Hill

Fremont Neighborhood Service Center   Lake Union

Greenwood Neighborhood Service Center   Northwest

University Neighborhood Service Center   Northeast

West Seattle Neighborhood Service Center   Southwest

Libraries

Lake City Branch Library   North

Green Lake Branch Library   North

Rainier Beach Branch Library   Southeast

West Seattle Branch Library   Southwest

Douglass-Truth Branch Library   Central

Southwest Branch Library   Southwest

High Point Branch Library   Southwest

Seattle Public Library, Central Library   Downtown

Appendix J: King County Senior Centers
Key: BOLD = City of Seattle; (ACCESS) = known computer site

Auburn Senior Center   (**ACCESS**)
910 9th SE
Auburn, WA 98002
931-3016

Ballard SPICE Center at Whittier School 7501
13th Avenue NW
Seattle, WA 98117
281-6834

Ballard Community Center
6020 28th Ave. NW
Seattle, WA 98107
684-4093

Ballard Neighborhood Service Center
2305 NW Market St
Seattle, WA 98107
684-4060

Black Diamond Community Center
31605 Third Avenue
Black Diamond, WA 98010
(Mailing address: P.O. Box 57)
886-2418

Burien Evergreen Club/Highline
Community Center
425 SW 144th
Seattle, WA 98166
296-2956

Center Park
2121 26th Ave S
Seattle, WA 98144
323-9322 (Council Office)

Central Area Senior Center   (ACCESS)
500 30th Ave South
Seattle, WA 98144 (Mt. Baker area)
461-7816

Chinese Information Center   (ACCESS)
409 Maynard Ave S
Seattle, WA 98104
624-5633

Chinese Day Care Center
409 Maynard Ave S
Seattle, WA 98104
624-5633

Columbia Club
424 Columbia St.
Seattle, WA 98104
448-5027

N. Bellevue Community Senior Ctr.
4063--148th NE
Bellevue, WA 98007
(Mailing Address: P.O. Box 90012)
Bellevue, WA 98009-9013
455-7681

Bitter Lake Community Center
13052 Greenwood Ave N
Seattle, WA 98133
684-7524

Des Moines Senior Center   (**ACCESS**)
22030 Cliff Avenue So.
Des Moines, WA 98198
878-1642

Dunlap SPICE
8621 46th Ave S
Seattle, WA 98118
281-6372

El Centro de la Raza   (ACCESS)
2524 16th Avenue S.
Seattle, WA 98144
329-7960

Enumclaw Senior Center   (**ACCESS**)
1350 Cole Street
Enumclaw, WA 98022
825-4741

Federal Way Evergreen Club
Calvary Lutheran Church
2415 S 320th
Federal Way, WA 98003
839-2591

Federal Way Senior Center
4016 S 352nd
Auburn, WA 98001
838-3604

First Presbyterian Church
Adult Ministries
1013 Eighth Avenue
Seattle, WA 98104
624-0644

Gethsemane Lutheran Church
Golden Circle Program

911 Stewart
Seattle, WA 98101
682-3620

Greenwood SeniorCenter
525 N 85th
Seattle, WA 98103
461-7841

Hiawatha Community Center
California SW and SW Lander
Seattle, WA 98116
684-7441

Highline Senior Center/Nutrition Site
1210 SW 136th   (**ACCESS**)
Seattle, WA 98166
244-3686

International District Congregate Meal
Program and Drop-In Center
(aka Filipino Senior Services Center)
409 Maynard Ave S
Seattle, WA 98104
587-3735

Issaquah Valley Senior Center
105 2nd Ave NE
(Mailing: PO Box 786)
Issaquah, WA 98027
392-2381

Japanese Nutrition Site (Meiji-Kai)
1212 S King
Seattle, WA 98 144
322-1122

Jefferson Community Center
3801 Beacon Ave S
Seattle, WA 98108
684-7481

Jewish Community Center
3801 E Mercer Way
Mercer Island, WA 98040
(mailing add: P.O. Box 779)
232-7115

Kent Parks Senior Center   (**ACCESS**)
600 E Smith
Kent, WA 98031
859-3342

Kirkland Progressive Club
Mailing: 12600 NE 145th St G56
Kirkland, WA 98034
828-4062

Kirkland Senior Center
406 Kirkland Ave
Kirkland, WA 98033
828-1223

Klahanee Lake Comm./Senior Ctr.
33901 Ninth Avenue South
Federal Way, WA 98003
661-4151

Korean Elders Programs
33901 Ninth Avenue South
Federal Way, WA 98003
661-4151

Kline Galland Home (Jewish Community)
7500 Seward Park South
Seattle, WA 98118
725-8800

Langston Hughes Cultural Arts Center
104 - 17th South
Seattle, WA 98144
684-4757

Laurelhurst Community Center
4554 NE 41st
Seattle, WA 98105
684-7529

Lawton SPICE
4000 27th Avenue W.
Seattle, WA 98199
281-6454

Loyal Heights Community Center
2101 NW 77th
Seattle, WA 98117
684-4052

Madison SPICE
3429 45th Ave S.W.
Seattle, WA 98116
281-6145

Magnolia Community Center
2550 34th W
Seattle, WA 98199
386-4235

Greater Maple Valley Senior Citizen Services/
Maple Valley Community Ctr
22010 SE 248th
Maple Valley, WA 98038
(Mailing add: P.O. Box 463)
432-3222

McClure SPICE
Cafeteria of McClure Jr.H.S.
1915 First Ave. W.
Seattle, WA 98119
281-6155

Mercer Island Senior Adult Svcs.
8236 SE 24th (Community Center at Mercer View)
Mercer Island, WA 98040
(Mailing add: 3505 88th SE)
236-3544

Mt. Si Senior Center
411 South Main St.
North Bend, WA 98045
(Mailing add: P.O. Box 806)
888-3434

Mt. Zion Senior Citizens   (ACCESS)
Mt. Zion Baptist Church
19th and East Madison
Seattle,WA 98122
322-6500

Muckleshoot Senior Center
39015 1 72nd Avenue SE
Auburn, WA 98002
939-3311

Nathan Hale SPICE
10750 30th NE
Seattle, WA 98125
281-6216

Newport Hills Evergreen Club
Newport Hills Baptist Church
5833 1l9th SE
Bellevue, WA 98006
746-8034

Northshore Senior Center   **(ACCESS)**
10201 E. Riverside Drive
Bothell, WA 98011
487-2441

Northwest Senior Center/Nutrition Site
5429 32nd Ave NW
Seattle, WA 98107
461-7811

Pacific Senior Center
100 3rd Ave SE
Pacific, WA 98047
931-8289

Pike Place Senior Center
1931 First Ave
Seattle, WA 98101
728-2773

Polynesian Senior Center
2910 S Warsaw Pl
Seattle, WA 98108
723-9644

Raging River Leisure Club
Fall City United Meth. Church
P.O. Box 640
4326 337th Place SE
Fall City, WA 98024
222-5458

Rainier Community Center   (ACCESS)
3701 S Oregon
Seattle, WA 98118
386-1919

Rainier Beach Community Center
8825 Rainier Ave S
Seattle, WA 98108
386-1925

Ravenna Bryant Senior Center
6559 Ravenna Ave NE
Seattle,WA 98115
527-0718

Redmond Senior Center
8703 160th Ave NE
(Mailing: 15670 NE 85th St)
Redmond, WA 98052
556-2314

Renton Senior Center
211 Burnett North
Renton, WA 98055
235-2533

Salvation Army Senior Ctr (White Center)
9002 16th SW
Seattle, WA 98055
763-8842

SeaTac Community Center
13735 24th Avenue S
SeaTac, WA 98168
439-9273

Senior Center of West Seattle   (ACCESS)
4217 SW Oregon
Seattle, WA 98116
932-4044

Seniors at Lowell: Bridging the Generations
Lowell Elementary School   (ACCESS)
1058 E Mercer St, Room G
Seattle, WA 98102
325-7628

Shoreline Senior Center   **(ACCESS)**
18560 1st Avenue NE, #1
Shoreline, WA 98155
365-1536

Sno-Valley Senior Center
P.O. Box 96
31804 Bird Street
Carnation, WA 98014
333-4152

South County Senior Center
220 Railroad Ave
Edmonds, WA 98020
774-5555

Southeast Seattle Senior Center   (ACCESS)
4655 South Holly St.
Seattle,WA 98118
722-0317

South Park Senior Program
8201 1 0th Ave S
Seattle, WA 98108
767-3650

Stevens SPICE
1242 18th Ave E
Seattle, WA 98112
281-6762

TallmadgeHamilton House   (ACCESS)
(See University Sr. Activity Center)

Tukwila Parks & Recreation Senior Program
4101 S 131st
Tukwila, WA 98168
433-1857

University Christian Church
610 Club
4731 15th Ave. NE
Seattle, WA 98105
522-0169

University Senior Activity Center   (ACCESS)
5225 15th Avenue NE
Seattle, WA 98105
524-0473

VashonMaury Senior Services Ctr.
17526 l00th Ave. SW
(Mailing add: Box 848)
Vashon Island, WA 98070
463-5173

Wallingford Senior Center   (ACCESS)
4649 Sunnyside Ave N
Seattle, WA 98103
461-7825

West Seattle   (ACCESS)
(see: "Senior Center of West Seattle")

Whittier SPICE
(see: "Ballard SPICE Center at Whittier
School")

Wilson/Pacific SPICE
1330 N 90th
(corner of 92nd & Ashworth)
Seattle, WA 98103
298-7799

Prepared in part by Senior Information &
Assistance
1601 Second Avenue, Suite 800
Seattle WA 98101
448-3110 and l-800-972-9990

Source: http:www.ci.seattle.wa.us/DHHS/AGING/
srcenter.htm

Totals: Access = 17   Seattle (10) Other (7)